

LLNL Livermore Site First Quarter 2012 Self-Monitoring Report

This quarterly report presents the first quarter 2012 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the first quarter of 2012 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity, and chloride analyses (Tables A-1 through A-5). Metals and radiological analyses are presented in Tables A-6 and A-7, respectively. During the first quarter of 2012, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the first quarter of 2012.

In an April 18, 2012 letter, the San Francisco Bay Regional Water Quality Control Board (SFBRWQB) concurred with LLNL's request to revise water quality monitoring at Lake Haussmann. The revised monitoring plan eliminates unnecessary or duplicative monitoring as the majority of the water in Lake Haussmann originates from treated groundwater discharged from treatment units operated under CERCLA cleanup. Beginning in 2012, Lake Haussmann monitoring data will no longer be included in the quarterly Self-Monitoring Reports and Ground Water Project Annual Reports. The data will continue to be reported in the LLNL Site Annual Environmental Report (SAER).

The Livermore Site CERCLA self-monitoring program stipulates annual testing of ground water by EPA Methods 602 and 625, if these constituents are known to be present in the influent. To confirm previous analytical results, all treatment facility influent, effluent, and receiving water locations were sampled during the quarter and submitted for EPA Method 602 and 625 tests. No EPA Method 602 compounds were detected in any of the samples. With the exception of two detections, all EPA Method 625 results were non-detect. Bis(2-ethylhexyl)phthalate was detected in the PTU11-I and GTU03-I January 2012 influent samples at concentrations of 10 µg/L and 53 µg/L, respectively. Bis(2-ethylhexyl)phthalate is not a known ground water contaminant at the Livermore Site. However, it is a common laboratory contaminant and

phthalates are commonly used in the manufacture of plastics such as PVC, which is used as treatment facility piping and ground water well casings and screens.

To demonstrate the elusiveness of the compound, the Treatment Facility B (TFB) influent (TFB-I002), effluent (TFB-E002) and receiving water (TFB-R002) locations were sampled on March 8, 2012, and analyzed by EPA Method 625. Although no EPA Method 625 constituents were detected in TFB-I002 or TFB-E002 samples, a concentration of 29 µg/L bis(2-ethylhexyl)phthalate was reported for the TFB-R002 receiving water sample. The analytical results indicate the detection of bis(2-ethylhexyl)phthalate was not due to LLNL Livermore CERCLA operations or due to laboratory contamination. A follow-on sampling plan will be developed and conducted to resample locations where the compound was detected and results will be reported in the subsequent second quarter self-monitoring report.

This work performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, January through March 2012.

Treatment Area ^a	Month	Volume of ground water extracted (Kgal) ^b	Volume of vapor extracted (Kcf) ^b
TFA	January	8,851	-
	February	9,904	-
	March	10,118	-
TFB	January	2,271	-
	February	1,693	-
	March	2,275	-
TFC	January	3,900	-
	February	3,737	-
	March	3,876	-
TFD	January	7,092	1,232
	February	6,135	1,388
	March	5,610	1,352
TFE	January	2,036	1,191
	February	1,627	1,235
	March	1,928	1,525
TFG	January	793	-
	February	693	-
	March	717	-
TFH	January	1,242	1,771
	February	1,094	1,679
	March	932	1,812
TOTAL^c		76,524	13,185

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B

^c Rounded number

Kcf = thousands of cubic feet

Kgal = thousands of gallons

Table 2. VOC mass removed at the Livermore Site, January through March 2012.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	1.2	-	1.2
TFB	0.6	-	0.6
TFC	1.3	-	1.3
TFD	6.5	0.6	7.1
TFE	2.0	0.9	2.9
TFG	0.2	-	0.2
TFH	0.8	6.9	7.7
TOTAL^b	12.6	8.4	21.0

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through March 2012.

Treatment Area^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Mcf)
TFA	1,886	-
TFB	445	-
TFC	491	-
TFD	1,019	99
TFE	370	163
TFG	82	-
TFH	165	237
TOTAL^b	4,458	499

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through March 2012.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	208	-	208
TFB	80	-	80
TFC	105	-	105
TFD	846	94	940
TFE	219	149	368
TFG	11	-	11
TFH	38	1,241	1,279
TOTAL^b	1,507	1,484	2,991

^a Refer to Table 1 footnote for facilities in each treatment facility area.^b Rounded number.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = millions of cubic feet.

Mgal = millions of gallons.

VOC = Volatile organic compound

Attachment A

VOC, Chromium, Bioassay,

Turbidity, Chloride, Metals, and

Radiological Analyses

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
TFA-I001	10-JAN-12	E601	<0.5	1.4	1	<0.5	1.5	<1	<0.5	7.4	<0.5	0.97	<0.5
TFA-I001	01-FEB-12	E601	<0.5	0.97	0.84	<0.5	1.3	<1	<0.5	6.7	<0.5	0.72	<0.5
TFA-I001	02-MAR-12	E601	<0.5	0.94	0.81	<0.5	1.3	<1	<0.5	7.1	<0.5	0.8	<0.5
TFA-E001	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	02-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E													
W-254	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	0.59	<1	<0.5	37	<0.5	1.2	<0.5
STU06-I	03-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	34	<0.5	0.98	<0.5
STU06-I	02-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	37	<0.5	1.2	<0.5
STU06-E	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	03-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	02-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-W^a													
W-404	26-JAN-12	E601	<0.5	<0.5	1.1	<0.5	1.8	<1	<0.5	10	<0.5	0.53	<0.5
TFA-W-E	26-JAN-12	E624	<1	<1	1.1	<1	1.8	<1	<1	10	<1	0.55	<1
TFB^b													
TFB-I002	10-JAN-12	E601	<0.5	1.9	<0.5	<0.5	1.4	<1	3.5	1.6	<0.5	11	<0.5
TFB-I002	21-FEB-12	E601	<0.5	2.1	<0.5	<0.5	1.5	<1	3.3	1.2	<0.5	11	<0.5
TFB-I002	22-FEB-12	E601	0.63	1.9	<0.5	<0.5	1.2	<1	2.7	1.3	<0.5	19	<0.5
TFB-I002	27-FEB-12	E601	0.68	2.8	<0.5	<0.5	1.7	<1	4.5	2.2	<0.5	20	<0.5
TFB-I002	01-MAR-12	E601	0.65	1.9	<0.5	<0.5	1.3	<1	2.7	1.4	<0.5	20	<0.5
TFB-I002	08-MAR-12	E624	<1	2.3	<1	<1	1.6	<2	4.2	1.5	<1	21	<1
TFB-I002	14-MAR-12	E601	0.67	2.4	<0.5	<0.5	1.3	<1	3.1	1.4	<0.5	18	<0.5
TFB-I002	21-MAR-12	E601	0.6	2.4	<0.5	<0.5	1.6	<1	2.8	1.3	<0.5	16	<0.5
TFB-I002	28-MAR-12	E601	0.5	2	<0.5	<0.5	1.3	<1	2.5	1.1	<0.5	12	<0.5
TFB-E002	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	21-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	22-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	27-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	01-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	08-MAR-12	E624	<1	<1	<1	<1	<1	<2	<2	<0.5	<0.5	<0.5	<1

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFB (cont.)													
TFB-E002	14-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	21-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	28-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	05-JAN-12	E601	<0.5	0.96	<0.5	<0.5	0.68	<1	9.1	2.7	<0.5	10	<0.5
TFC-I003	01-FEB-12	E601	<0.5	0.96	<0.5	<0.5	0.63	<1	8.8	2.8	<0.5	10	<0.5
TFC-I003	05-MAR-12	E601	<0.5	0.91	<0.5	<0.5	0.65	<1	9	2.9	<0.5	10	<0.5
TFC-E003	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E													
MTU1-I	18-JAN-12	E601	<0.5	14	<0.5	<0.5	0.76	<1	8.4	0.6	<0.5	8.6	3.1
MTU1-I	01-FEB-12	E601	<0.5	16	<0.5	<0.5	1.1	<1	15	0.69	<0.5	10	5.4
MTU1-I	05-MAR-12	E601	<0.5	15	<0.5	<0.5	1.1	<1	13	0.69	<0.5	10	4.9
MTU1-E	18-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-SE													
PTU1-I	04-JAN-12	E601	<0.5	7.2	<0.5	<0.5	2.3	<1	15	0.62	<0.5	17	0.85
PTU1-I	01-FEB-12	E601	<0.5	7.5	<0.5	<0.5	2.3	<1	14	0.62	<0.5	17	0.91
PTU1-I	05-MAR-12	E601	<0.5	7.6	<0.5	<0.5	2.3	<1	16	0.61	<0.5	17	0.96
PTU1-E	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD													
TFD-I004	04-JAN-12	E601	2.4	2.2	<0.5	<0.5	0.98	<1	0.71	1.6	<0.5	68	20
TFD-I004	03-FEB-12	E601	2.5	2.4	<0.5	<0.5	0.99	<1	0.68	1.6	<0.5	67	23
TFD-I004	02-MAR-12	E601	2.3	2.3	<0.5	<0.5	1	<1	0.68	1.8	<0.5	63	20
TFD-E004	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	03-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	02-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-E													
PTU8-I	04-JAN-12	E601	3.5	1.3	<0.5	0.94	1.9	<1	<0.5	2.6	<0.5	89	0.73
PTU8-I	02-FEB-12	E601	4	1.4	<0.5	1.1	2.1	<1	<0.5	2.6	<0.5	98	0.88
PTU8-I	05-MAR-12	E601	2.7	0.88	<0.5	0.58	1.2	<1	<0.5	1.7	<0.5	62	0.57
PTU8-E	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	02-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD^c													
TFD-S													
PTU2-I	12-JAN-12	E601	0.72	2.1	<0.5	<0.5	4.7	<1	1.3	6.5	<0.5	56	<0.5
PTU2-I	07-FEB-12	E601	0.74	2	<0.5	<0.5	4.6	<1	1.3	7	<0.5	56	<0.5
PTU2-I	13-MAR-12	E601	0.61	1.7	<0.5	<0.5	4.5	<1	1.2	6.7	<0.5	52	<0.5
PTU2-E	12-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	07-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	13-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	04-JAN-12	E601	<0.5	2.5	0.7	1.1	8.2	<1	0.66	30	<0.5	81	<0.5
PTU11-I	07-FEB-12	E601	<0.5	2.8	0.74	1.3	9.2	<1	0.84	32	<0.5	85	<0.5
PTU11-I	05-MAR-12	E601	<0.5	2.5	0.59	1	4.6	<1	0.67	14	<0.5	42	<0.5
PTU11-E	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	07-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	11-JAN-12	E601	1.8	2	0.7	2.4	10	<1	<0.5	19	<0.5	91	6.4
PTU12-I	07-FEB-12	E601	1.8	2.4	0.71	2.6	11	<1	0.63	22	<0.5	130	6.2
PTU12-I	13-MAR-12	E601	1.9	2.5	0.7	2.6	11	<1	0.63	23	<0.5	140	7.1
PTU12-E	11-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	07-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	13-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-W													
PTU6-I	10-JAN-12	E601	<0.5	4.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.8	48
PTU6-I	08-FEB-12	E601	<0.5	4.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.7	50
PTU6-I	08-MAR-12	E601	<0.5	4.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.5	47
PTU6-E	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	08-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	08-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E													
PTU3-I	05-JAN-12	E601	<0.5	3.1	<0.5	<0.5	8.9	<1	7.1	8.4	<0.5	64	<0.5
PTU3-I	01-FEB-12	E601	<0.5	2.7	<0.5	<0.5	8.6	<1	7	10	<0.5	61	<0.5
PTU3-I	05-MAR-12	E601	<0.5	2.6	<0.5	<0.5	10	<1	7	12	<0.5	71	<0.5
PTU3-E	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-HS													
W-2105	11-JAN-12	E601	<0.5	1.2	<0.5	<0.5	3.9	4.4	6.8	15	<0.5	240	<0.5
GTU07-I	11-JAN-12	E601	<0.5	1.1	<0.5	<0.5	3	3	5.2	12	<0.5	250	<0.5
GTU07-I	02-FEB-12	E601	<0.5	1.4	<0.5	<0.5	3.6	3	6.8	15	<0.5	400	<0.5
GTU07-I	06-MAR-12	E601	<0.5	1.2	<0.5	<0.5	3.1	2.5	5.8	15	<0.5	310	<0.5
GTU07-E	11-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	02-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	06-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	10-JAN-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	1.1	<0.5	<0.5	13	<0.5
PTU9-I	02-FEB-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	1.1	<0.5	<0.5	13	<0.5
PTU9-I	13-MAR-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	0.98	<0.5	<0.5	13	<0.5
PTU9-E	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	02-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	13-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE													
W-359	05-JAN-12	E601	4.8	1.4	<0.5	<0.5	21	<1	6	9	<0.5	240	1.3
MTU04-I	01-FEB-12	E601	4.6	1.5	<0.5	<0.5	20	<1	6	8.6	<0.5	300	1.3

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SE (cont.)													
MTU04-I	05-MAR-12	E601	4.1	1.5	<0.5	<0.5	20	<1	6.4	8.8	<0.5	250	1.1
MTU04-E	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW													
MTU03-I	12-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	1.7	1.5	6.3	1	<0.5	14	<0.5
MTU03-I	08-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	1.6	1.4	6.6	1	<0.5	13	<0.5
MTU03-I	08-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	1.6	1.4	6.1	1	<0.5	13	<0.5
MTU03-E	12-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	08-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	08-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-W													
MTU05-I	11-JAN-12	E601	<0.5	1.2	<0.5	<0.5	2.3	1.5	14	6	<0.5	33	0.51
MTU05-I	08-FEB-12	E601	<0.5	1.2	<0.5	<0.5	2.1	1.4	14	5.9	<0.5	32	0.51
MTU05-I	08-MAR-12	E601	<0.5	1.2	<0.5	<0.5	2	1.3	14	6	<0.5	32	0.5
MTU05-E	11-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	08-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	08-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-1													
W-1111	12-JAN-12	E601	2.7	11	<0.5	<0.5	1	<1	<0.5	1	<0.5	4.3	<0.5
GTU01-I	06-FEB-12	E601	2.8	11	<0.5	<0.5	1	<1	0.5	1.2	<0.5	4.2	<0.5
GTU01-I	15-MAR-12	E601	2.8	11	<0.5	<0.5	0.97	<1	<0.5	1	<0.5	4.4	<0.5
GTU01-E	12-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	06-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	15-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-N													
MTU02-I	10-JAN-12	E601	<0.5	1.7	<0.5	<0.5	1.2	<1	1.1	20	<0.5	6	<0.5
MTU02-I	06-FEB-12	E601	<0.5	1.6	<0.5	<0.5	1.1	<1	1.1	19	<0.5	5.7	<0.5
MTU02-I	15-MAR-12	E601	<0.5	1.6	<0.5	<0.5	1	<1	1	18	<0.5	5.9	<0.5
MTU02-E	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFG-N (cont.)													
MTU02-E	06-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	15-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406													
PTU5-I	10-JAN-12	E601	<0.5	0.71	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.5	<0.5
PTU5-I	08-FEB-12	E601	<0.5	0.76	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.4	<0.5
PTU5-I	08-MAR-12	E601	<0.5	0.71	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.9	<0.5
PTU5-E	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	08-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	08-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW													
W-1801	05-JAN-12	E601	<0.5	1.3	<0.5	<0.5	<0.5	<1	4.5	0.69	<0.5	23	<0.5
GTU03-I	02-FEB-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	4.4	0.71	<0.5	23	<0.5
GTU03-I	14-MAR-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	4.2	0.64	<0.5	24	<0.5
GTU03-E	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	02-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	14-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF518-N^d	---	---	--	--	--	--	--	--	--	--	--	--	--
TF5475-1^e													
W-1302-2	23-MAR-12	E601	2.6	50	2	7.3	26	1.1	8.1	65	<0.5	390	<0.5
TF5475-2													
GTU09-I	10-JAN-12	E601	2	22	0.71	2.7	20	<1	6.7	35	<0.5	250	<0.5
GTU09-I	02-FEB-12	E601	2.5	26	0.84	3.7	22	<1	7.4	43	<0.5	390	<0.5
GTU09-I	05-MAR-12	E601	2.4	25	0.76	3.5	21	<1	8.3	41	<0.5	340	<0.5
GTU09-E	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	02-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	05-MAR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF5475-3^f	---	---	--	--	--	--	--	--	--	--	--	--	--

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

^a TFA-W effluent is discharged to the Livermore Water Reclamation Plant in accordance with Permit #151OG (2006-2008). The discharge limit for Total Toxic Organics is 1.0 mg/L.

Well W-404 is sampled quarterly. All other operations have been suspended pending the extension of the TFA Arroyo Seco pipeline.

^b TFB had multiple samples taken during the months of February and March due to the testing and verification phase of the REVAL/wellfield expansion project.

^c TFD-HPD has been modified to operate as a circulation cell to perform in situ bioremediation of contaminated ground water and sediments.

^d TF518-N did not operate during this reporting period due to mixed waste disposition issues.

^e TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

^f TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
W-109	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.6	1.8	<0.5	<0.5	<0.5
W-262	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-408	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.54	<0.5	<0.5	<0.5
W-415	19-JAN-12	E601	<0.5	1.3	0.73	<0.5	1.6	<1	<0.5	11	<0.5	1.1	<0.5
W-457	19-JAN-12	E601	<0.5	<0.5	0.9	<0.5	0.99	<1	<0.5	6.7	<0.5	<0.5	<0.5
W-518	19-JAN-12	E601	<0.5	<0.5	8	<0.5	3.6	<1	<0.5	3.4	<0.5	<0.5	<0.5
W-522	19-JAN-12	E601	<0.5	<0.5	1.9	<0.5	1.3	<1	<0.5	3.5	<0.5	<0.5	<0.5
W-605	19-JAN-12	E601	<0.5	0.53	0.85	<0.5	1.2	<1	<0.5	16	<0.5	0.88	<0.5
W-614	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	6.4	<0.5	<0.5	<0.5
W-712	19-JAN-12	E601	3	3.1	1.2	<0.5	3.8	<1	<0.5	2	<0.5	3.7	<0.5
W-714	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	8.2	<0.5	<0.5	<0.5
W-903	19-JAN-12	E601	<0.5	<0.5	1.4	<0.5	1.1	<1	<0.5	5.6	<0.5	<0.5	<0.5
W-904	19-JAN-12	E601	<0.5	<0.5	0.76	<0.5	1.1	<1	<0.5	6.3	<0.5	<0.5	<0.5
W-1001	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	19-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	2.6	<0.5	<0.5	<0.5
W-1009	19-JAN-12	E601	1.2	5.6	0.81	<0.5	3.3	<1	0.59	12	<0.5	2.1	<0.5
TFA-E													
W-254	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	0.59	<1	<0.5	37	<0.5	1.2	<0.5
TFA-W													
W-404	26-JAN-12	E601	<0.5	<0.5	1.1	<0.5	1.8	<1	<0.5	10	<0.5	0.53	<0.5
TFB													
W-357	20-JAN-12	E601	1.5	2.9	<0.5	<0.5	1.5	<1	4.7	1.1	<0.5	36	<0.5
W-610	20-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	1.2	<1	1.7	0.78	<0.5	1.9	<0.5
W-620	20-JAN-12	E601	<0.5	1.1	<0.5	<0.5	1.3	<1	2.3	1.4	<0.5	5.1	<0.5
W-621	20-JAN-12	E601	<0.5	0.52	<0.5	<0.5	<0.5	<1	1.2	<0.5	<0.5	3.7	<0.5
W-655	20-JAN-12	E601	<0.5	0.85	<0.5	<0.5	<0.5	<1	3.3	<0.5	<0.5	2.6	<0.5
W-704	20-JAN-12	E601	0.61	3.6	<0.5	<0.5	2	<1	5.3	2.9	<0.5	22	<0.5
W-1423	20-JAN-12	E601	0.84	4.8	<0.5	<0.5	3.3	<1	3.7	2	<0.5	11	<0.5
W-2501 ^a	07-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	12	<0.5
W-2502 ^a	07-NOV-11	E601	<0.5	0.88	<0.5	<0.5	0.86	<1	1.9	1.7	<0.5	8.1	<0.5
TFC													
W-701	05-JAN-12	E601	<0.5	2	<0.5	<0.5	1.4	<1	27	3.3	<0.5	22	<0.5
W-1015	05-JAN-12	E601	<0.5	0.56	<0.5	<0.5	0.83	<1	2	0.99	<0.5	5	<0.5
W-1102	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	2.7	<0.5	<0.5	1.7	<0.5
W-1103	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.4	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC (cont.)													
W-1104	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.7	3.1	<0.5	6.3	<0.5
W-1116	05-JAN-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	6.8	3.2	<0.5	7.9	<0.5
TFC-E													
W-368	01-FEB-12	E601	<0.5	9.3	<0.5	<0.5	0.63	<1	21	2.6	<0.5	16	5.8
W-413	01-FEB-12	E601	<0.5	17	<0.5	<0.5	1.2	<1	14	<0.5	<0.5	9.8	5.3
TFC-SE													
W-1213	04-JAN-12	E601	<0.5	5.9	<0.5	<0.5	3	<1	11	<0.5	<0.5	17	<0.5
W-2201	04-JAN-12	E601	<0.5	8.1	<0.5	<0.5	2.2	<1	19	0.78	<0.5	18	1.2
TFD													
W-351	04-JAN-12	E601	32	6	<0.5	0.88	6.8	<1	6.8	7.4	<0.5	740	1.4
W-653	12-JAN-12	E601	3.9	4.7	<0.5	<0.5	<0.5	49	0.55	<0.5	<0.5	150	<0.5
W-906	04-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.5	<0.5
W-907-2	04-JAN-12	E601	<0.5	3.3	<0.5	<0.5	2.2	<1	0.81	3.8	<0.5	49	<0.5
W-2011	12-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	3.3	<0.5
W-2101	04-JAN-12	E601	6	2.9	<0.5	<0.5	<0.5	<1	0.57	<0.5	<0.5	260	<0.5
W-2102	12-JAN-12	E601	8.1	6.8	<0.5	<0.5	<0.5	<1	1.6	0.97	<0.5	170	<0.5
W-1206	04-JAN-12	E601	0.84	1.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	19	<0.5
W-1208	04-JAN-12	E601	2.5	2.1	<0.5	<0.5	<0.5	<1	0.52	0.74	<0.5	60	35
TFD-E													
W-2006	05-MAR-12	E601	<0.5	1.4	2	7.2	45	<1	<0.5	18	<0.5	190	<0.5
W-1301	05-MAR-12	E601	<0.5	0.69	<0.5	<0.5	5.8	<1	<0.5	12	<0.5	39	<0.5
W-1303	04-JAN-12	E601	4.2	3	1.4	5.3	9.2	2.1	<0.5	11	<0.5	130	4.8
W-1306	05-MAR-12	E601	2.8	3.7	<0.5	<0.5	1	<1	<0.5	4.8	<0.5	100	<0.5
W-1307	04-JAN-12	E601	3.7	0.9	<0.5	<0.5	0.5	<1	<0.5	0.7	<0.5	66	<0.5
W-1404 ^a	13-APR-11	E601	1	3.3	1	8.7	13	1.3	<0.5	22	<0.5	140	0.98
W-1550	05-MAR-12	E601	2.2	2.3	<0.5	<0.5	1.4	<1	<0.5	3.9	<0.5	47	<0.5
W-2203	04-JAN-12	E601	12	2.6	<0.5	<0.5	2.5	<1	2.7	6.9	<0.5	93	<0.5
TFD-HPD													
W-1254	12-MAR-12	E601	1.8	0.64	<0.5	<0.5	<0.5	<1	0.57	<0.5	<0.5	64	<0.5
W-1650	12-MAR-12	E601	1.7	1.4	<0.5	<0.5	<0.5	<1	0.92	<0.5	<0.5	110	<0.5
W-1653	12-MAR-12	E601	0.69	1.9	<0.5	<0.5	<0.5	<1	<0.5	0.73	<0.5	100	<0.5
W-1655	12-MAR-12	E601	<0.5	2	<0.5	<0.5	<0.5	<1	<0.5	2.5	<0.5	68	<0.5
W-1657	12-MAR-12	E601	5.8	3	<0.5	<0.5	<0.5	<1	2.3	<0.5	<0.5	540	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-S													
W-1503	12-JAN-12	E601	1.5	2	<0.5	<0.5	1.6	<1	0.59	2.1	<0.5	50	<0.5
W-1504	12-JAN-12	E601	<0.5	1.4	<0.5	<0.5	9.7	1.5	2.4	14	<0.5	79	<0.5
W-1510	12-JAN-12	E601	<0.5	3.4	<0.5	<0.5	1.9	<1	<0.5	2.8	<0.5	24	<0.5
TFD-SE													
W-314	04-JAN-12	E601	<0.5	1.3	0.53	<0.5	2.8	<1	0.54	4.7	<0.5	35	<0.5
W-2005	05-MAR-12	E601	<0.5	0.88	<0.5	<0.5	4	<1	<0.5	25	<0.5	33	<0.5
W-1308	04-JAN-12	E601	<0.5	1.4	1.1	2.6	17	<1	<0.5	97	<0.5	110	<0.5
W-1403	04-JAN-12	E601	2.1	16	1.3	4.8	40	<1	3.7	74	<0.5	170	<0.5
W-1904 ^a	27-JUN-11	E601	<0.5	<0.5	<0.5	<0.5	15	1.8	<0.5	57	<0.5	24	<0.5
SIP-ETC-201 ^a	15-JUN-11	E601	<0.5	1.1	3.9	1.2	86	<1	<0.5	480	<0.5	300	<0.5
TFD-SS													
W-1523	11-JAN-12	E601	3.6	2.2	<0.5	1.1	9.1	<1	0.99	13	<0.5	87	<0.5
W-1601	11-JAN-12	E601	4.1	4	1.7	7.1	30	1.4	1.4	80	<0.5	230	<0.5
W-1602	11-JAN-12	E601	<0.5	1.3	<0.5	<0.5	0.65	<1	<0.5	1.3	<0.5	13	6.2
W-1603	11-JAN-12	E601	1.4	2	0.94	3.2	12	1	<0.5	24	<0.5	110	8.9
TFD-W													
W-1215	10-JAN-12	E601	<0.5	6.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.4	21
W-1216	10-JAN-12	E601	<0.5	4.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.1	37
W-1902	10-JAN-12	E601	0.56	3.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.9	68
TFE-E													
W-566	05-JAN-12	E601	<0.5	2.6	<0.5	<0.5	3.4	<1	5.5	2.9	<0.5	38	<0.5
W-1109	01-FEB-12	E601	<0.5	<0.5	<0.5	<0.5	16	<1	3.9	33	<0.5	130	<0.5
W-1903	05-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	24	<1	6.4	24	<0.5	50	<0.5
W-1909 ^a	14-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	9.1	1.1	<0.5	5.4	<0.5	6.5	<0.5
W-2305	05-JAN-12	E601	<0.5	1.3	<0.5	<0.5	34	<1	3.8	43	<0.5	230	<0.5
TFE-HS													
W-2105	11-JAN-12	E601	<0.5	1.2	<0.5	<0.5	3.9	4.4	6.8	15	<0.5	240	<0.5
TFE-NW													
W-1211	10-JAN-12	E601	<0.5	1.5	<0.5	<0.5	<0.5	<1	1.3	<0.5	<0.5	10	<0.5
W-1409	10-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	0.72	<1	<0.5	1.2	<0.5	23	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SE													
W-359	05-JAN-12	E601	4.8	1.4	<0.5	<0.5	21	<1	6	9	<0.5	240	1.3
TFE-SW													
W-1518	12-JAN-12	E601	<0.5	<0.5	<0.5	<0.5	1.6	1.5	6.1	0.99	<0.5	13	<0.5
W-1520	12-JAN-12	E601	14	9.4	<0.5	4.8	3.3	3.1	<0.5	17	<0.5	300	<0.5
W-1522	12-JAN-12	E601	3.1	4.2	1.1	<0.5	8	17	1.5	1.8	<0.5	100	<0.5
TFE-W													
W-292	11-JAN-12	E601	<0.5	0.85	<0.5	<0.5	1.2	3	1.4	1.2	<0.5	21	<0.5
W-305	11-JAN-12	E601	<0.5	1.3	<0.5	<0.5	2.9	<1	21	9	<0.5	39	0.78
TFG-1													
W-1111	12-JAN-12	E601	2.7	11	<0.5	<0.5	1	<1	<0.5	1	<0.5	4.3	<0.5
TFG-N													
W-1806	10-JAN-12	E601	<0.5	0.91	<0.5	<0.5	<0.5	<1	<0.5	24	<0.5	5.5	<0.5
W-1807	10-JAN-12	E601	<0.5	2.3	<0.5	<0.5	1.7	<1	1.8	18	<0.5	6.5	<0.5
TF406													
W-1309	10-JAN-12	E601	0.53	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.3	<0.5
W-1310	10-JAN-12	E601	<0.5	0.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.9	<0.5
TF406-NW													
W-1801	05-JAN-12	E601	<0.5	1.3	<0.5	<0.5	<0.5	<1	4.5	0.69	<0.5	23	<0.5
TF518-N^b													
W-1410 ^a	16-JUN-11	E601	3.4	3.1	<0.5	0.66	<0.5	<1	<0.5	0.78	<0.5	26	<0.5
TF518-PZ													
W-1615	05-MAR-12	E601	<0.5	0.6	<0.5	<0.5	4.4	<1	<0.5	41	<0.5	160	<0.5
W-518-1913 ^a	23-MAY-11	E601	<0.5	<0.5	<0.5	<0.5	0.76	<1	<0.5	3.8	<0.5	29	<0.5
W-518-1914 ^a	11-OCT-11	E601	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	180	<0.5	74	<0.5
W-518-1915 ^c	05-MAR-12	E601	<2.5	<2.5	<2.5	<2.5	8.4	<5	<2.5	110	<2.5	1300	<2.5
SVB-518-201 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5
SVB-518-204 ^a	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^b													
W-1302-2	23-MAR-12	E601	2.6	50	2	7.3	26	1.1	8.1	65	<0.5	390	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF5475-2													
W-1108	10-JAN-12	E601	2	22	0.69	2.6	20	<1	6.6	36	<0.5	260	<0.5
W-1415 ^a	27-JUN-11	E601	<0.5	4.2	<0.5	<0.5	1.2	<1	<0.5	2.6	<0.5	20	<0.5
TF5475-3^b													
W-1604	23-MAR-12	E601	6.5	96	3	27	42	2.6	14	100	<0.5	980	<0.5
W-1605	23-MAR-12	E601	<0.5	23	0.61	4	1.6	37	<0.5	6.4	<0.5	59	<0.5
W-1608	23-MAR-12	E601	<0.5	18	<0.5	1.6	1.3	26	<0.5	5.2	<0.5	46	<0.5
W-1609	23-MAR-12	E601	<0.5	35	0.69	3.3	3.6	<1	<0.5	14	<0.5	120	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

^a Most recent VOC sample results available.

^b Elevated detection limit due to dilution.

^c Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTFD-ETCS													
W-1904	16-FEB-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	0.33	<0.005	0.12	<0.005
W-ETC-2003	16-FEB-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005	<0.005	0.11	<0.005	0.046	<0.005
W-ETC-2004A	16-FEB-12	TO15DIT	<0.005	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	0.29	<0.005	0.11	<0.005
W-ETC-2004B	16-FEB-12	TO15DIT	<0.005	0.014	0.0056	<0.005	0.1	<0.005	<0.005	0.59	<0.005	0.88	<0.005
SIP-ETC-201	16-FEB-12	TO15DIT	<0.005	<0.005	0.008	<0.005	0.034	<0.005	<0.005	0.37	<0.005	0.4	<0.005
VTFD-HS^a													
W-653 ^b	03-NOV-09	TO15DIT	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	0.58	<0.005
W-2011 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.081	<0.005
W-2101 ^b	03-NOV-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.052	<0.005
W-2102 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.11	<0.005
VTFE-ELM													
W-1903	06-MAR-12	TO15DIT	<0.005	0.0052	0.015	<0.005	1.4	0.0073	0.22	1.2	<0.005	3.1	<0.005
W-1909 ^b	06-OCT-11	TO15DIT	<0.005	0.034	<0.005	<0.005	0.51	<0.005	0.054	0.88	<0.005	1.2	<0.005
W-2305 ^b	06-OCT-11	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.2	<0.005	0.036	0.46	<0.005	0.55	<0.005
W-543-001	06-MAR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	0.77	<0.005	0.15	<0.005
W-543-003	06-MAR-12	TO15DIT	<0.005	0.018	<0.005	<0.005	0.16	<0.005	0.031	0.32	<0.005	0.66	<0.005
W-543-1908	06-MAR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0082	<0.005	<0.005	0.078	<0.005	0.28	<0.005
VTFE-HS													
W-2105	18-JAN-12	TO15DIT	<0.005	0.01	<0.005	<0.005	0.023	0.0057	0.13	0.22	<0.005	3.9	<0.005
W-ETS-2008A	18-JAN-12	TO15DIT	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.028	<0.005
W-ETS-2008B	18-JAN-12	TO15DIT	<0.005	0.0051	<0.005	<0.005	0.0064	0.0068	0.018	0.41	<0.005	1.2	<0.005
W-ETS-2009	18-JAN-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.038	<0.005	0.3	<0.005
W-ETS-2010A	18-JAN-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	0.07	<0.005
W-ETS-2010B	18-JAN-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	0.014	0.13	<0.005	0.37	<0.005
VTF406-HS													
W-217	16-FEB-12	TO15DIT	0.12	0.029	0.01	<0.005	0.92	0.01	0.1	0.7	<0.005	1.8	0.0079
W-514-2007A	16-FEB-12	TO15DIT	0.052	<0.005	<0.005	<0.005	0.032	<0.005	0.08	0.16	<0.005	0.32	3.4
W-514-2007B	16-FEB-12	TO15DIT	0.067	0.018	0.006	<0.005	0.48	<0.005	0.048	0.29	<0.005	1.1	0.023
VTF511													
W-2204	12-MAR-12	TO15DIT	0.12	0.03	<0.01	0.036	0.02	<0.01	0.01	0.54	<0.01	5.4	<0.01
W-2205	12-MAR-12	TO15DIT	0.074	0.01	<0.005	<0.005	0.018	<0.005	0.0052	0.14	<0.005	2	0.0056
W-2206	12-MAR-12	TO15DIT	0.0058	0.0091	<0.005	0.038	<0.005	<0.005	<0.005	0.15	<0.005	1.1	<0.005
W-2207A	16-FEB-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	0.57	<0.005
W-2207B	16-FEB-12	TO15DIT	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	0.025	<0.0086	1.9	<0.0086

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF511 (cont.)													
W-2208A	16-FEB-12	TO15DIT	0.064	0.035	<0.016	<0.016	0.075	<0.016	<0.016	0.047	<0.016	12	0.056
W-2208B	16-FEB-12	TO15DIT	0.17	0.12	0.095	<0.064	1.1	0.2	0.091	0.46	<0.064	27	0.11
VTF518-PZ													
W-1615	16-FEB-12	TO15DIT	0.012	<0.0071	<0.0071	<0.0071	0.43	<0.0071	0.064	1.6	<0.0071	6.3	<0.0071
W-518-1913	08-MAR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	0.028	<0.005	0.23	<0.005
W-518-1914	08-MAR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	2.9	<0.005	0.23	<0.005
W-518-1915	16-FEB-12	TO15DIT	<0.025	<0.025	<0.025	<0.025	0.062	<0.025	<0.025	15	<0.025	7.2	<0.025
SVB-518-201	08-MAR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0055	<0.005	0.013	<0.005
SVB-518-204	08-MAR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	0.076	<0.005
VTF5475^c													
W-ETS-507	26-MAR-12	TO15DIT	<0.005	2.1	<0.005	0.24	0.042	<0.005	0.007	0.4	<0.005	1.9	<0.005
W-1605 ^b	06-SEP-07	TO15DI	0.0069	0.17	<0.005	0.15	0.11	<0.005	0.036	0.1	<0.005	0.85	<0.005
W-1608 ^b	06-SEP-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005
W-2211	28-MAR-12	TO15DIT	0.011	0.45	0.015	0.056	0.27	<0.005	0.063	0.22	<0.005	1.6	<0.005
W-2212	28-MAR-12	TO15DIT	0.031	0.48	0.019	0.064	0.69	<0.005	0.22	0.19	<0.005	1.4	<0.005
W-2302	26-MAR-12	TO15DIT	0.011	0.12	<0.005	0.0095	0.21	<0.005	0.048	0.24	<0.005	2.5	<0.005
W-2303	26-MAR-12	TO15DIT	<0.005	0.49	0.017	0.048	0.12	<0.005	0.0097	0.29	<0.005	1.9	<0.005
SVI-ETS-504	28-MAR-12	TO15DIT	<0.005	0.31	0.0087	0.0053	0.075	<0.005	0.0052	0.13	<0.005	0.65	<0.005

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a VTFD-HS did not operate during reporting period due to dual extraction well ground water pump failure.

^b Most recent VOC vapor sample results available.

^c VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Notes:

CCl_4 = Carbon tetrachloride

CHCl_3 = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFA	TFA-I001	01-FEB-12	0.015	NA
	TFA-E001	01-FEB-12	0.012	0.012
TFA-E	W-254	04-JAN-12	0.01	NA
	STU06-E	04-JAN-12	<0.005	<0.005
TFA-W	TFA-W-E	26-JAN-12	0.015	NA
TFB	TFB-I002	21-FEB-12	0.019	0.016
	TFB-I002	22-FEB-12	0.0025	<0.002
	TFB-I002	01-MAR-12	NA	<0.002
	TFB-I002	08-MAR-12	0.0027	NA
	TFB-E002	10-JAN-12	0.017	NA
	TFB-E002	21-FEB-12	0.014	0.012
	TFB-E002	22-FEB-12	0.002	<0.002
	TFB-E002	27-FEB-12	0.013	NA
	TFB-E002	01-MAR-12	NA	<0.002
	TFB-E002	08-MAR-12	<0.005	0.0022
	TFB-R002	08-MAR-12	0.0082	NA
TFC	TFC-I003	05-JAN-12	0.022	NA
	TFC-E003	05-JAN-12	0.011	0.013
	TFC-E003	01-FEB-12	0.017	NA
	TFC-E003	05-MAR-12	0.015	NA
	TFC-R003	05-JAN-12	0.0079	NA
TFC-E	MTU1-I	18-JAN-12	0.051	NA
	MTU1-E	18-JAN-12	0.0042	<0.005
	MTU1-E	01-FEB-12	0.0028	NA
	MTU1-E	05-MAR-12	0.0029	NA
TFC-SE	PTU1-I	04-JAN-12	0.031	NA
	PTU1-E	04-JAN-12	0.014	0.015
	PTU1-E	01-FEB-12	0.019	NA
	PTU1-E	05-MAR-12	0.018	NA
TFD	TFD-I004	04-JAN-12	0.01	NA
	TFD-E004	04-JAN-12	0.008	0.0089
TFD-E	PTU8-I	04-JAN-12	0.0096	NA
	PTU8-E	04-JAN-12	0.0086	0.0075
TFD-S	PTU2-I	12-JAN-12	0.014	NA
	PTU2-E	12-JAN-12	0.011	0.012
TFD-SE	PTU11-I	04-JAN-12	0.0099	NA
	PTU11-E	04-JAN-12	0.0096	0.0084
TFD-SS	PTU12-I	11-JAN-12	0.012	NA
	PTU12-E	11-JAN-12	0.0077	0.01
TFD-W	PTU6-I	10-JAN-12	0.014	NA
	PTU6-E	10-JAN-12	0.0082	0.011
TFE-E	PTU3-I	05-JAN-12	0.012	NA
	PTU3-E	05-JAN-12	0.0074	0.0093

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFE-HS	GTU07-I	11-JAN-12	0.0025	NA
	GTU07-E	11-JAN-12	<0.005	<0.005
TFE-NW	PTU9-I	10-JAN-12	0.015	NA
	PTU9-E	10-JAN-12	0.0084	0.011
TFE-SE	W-359	05-JAN-12	0.0093	NA
	MTU04-E	05-JAN-12	0.0062	0.0076
TFE-SW	MTU03-I	12-JAN-12	0.0053	NA
	MTU03-E	12-JAN-12	<0.005	<0.005
TFE-W	MTU05-I	11-JAN-12	0.011	NA
	MTU05-E	11-JAN-12	0.0076	0.0096
TFG-1	W-1111	12-JAN-12	0.0092	NA
	GTU01-E	12-JAN-12	<0.005	0.0056
	TFG-ASW	12-JAN-12	0.013	NA
TFG-N	MTU02-I	10-JAN-12	0.0098	NA
	MTU02-E	10-JAN-12	0.0052	0.0073
TF406	PTU5-I	10-JAN-12	0.016	NA
	PTU5-E	10-JAN-12	0.009	0.011
TF406-NW	W-1801	05-JAN-12	0.0024	NA
	GTU03-E	05-JAN-12	<0.005	<0.005
TF5475-2	GTU09-I	10-JAN-12	0.016	NA
	GTU09-E	10-JAN-12	<0.005	<0.005

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TFA	TFA-E001	01-FEB-12	100 (100)	0.1	79
TFA-E	STU06-E	04-JAN-12	100 (100)	0.1	42
TFB	TFB-E002	08-MAR-12	100 (100)	0.33	73
TFC	TFC-E003	05-JAN-12	100 (100)	0.28	120
TFC-E	MTU1-E	18-JAN-12	100 (100)	0.12	140
TFC-SE	PTU1-E	04-JAN-12	100 (100)	0.13	87
TFD	TFD-E004	04-JAN-12	100 (100)	0.25	280
TFD-E	PTU8-E	04-JAN-12	100 (100)	0.2	350
TFD-S	PTU2-E	12-JAN-12	100 (100)	0.46	67
TFD-SE	PTU11-E	04-JAN-12	100 (100)	0.1	180
TFD-SS	PTU12-E	11-JAN-12	100 (100)	0.12	160
TFD-W	PTU6-E	10-JAN-12	100 (100)	0.12	200
TFE-E	PTU3-E	05-JAN-12	100 (100)	NA	100
	PTU3-E	10-JAN-12	NA	0.15	NA
TFE-HS	GTU07-E	11-JAN-12	100 (100)	0.13	52
TFE-NW	PTU9-E	10-JAN-12	100 (100)	0.13	90
TFE-SE	MTU04-E	05-JAN-12	100 (100)	0.11	88
TFE-SW	MTU03-E	12-JAN-12	100 (100)	0.15	67
TFE-W	MTU05-E	11-JAN-12	100 (100)	<0.1	59
TFG-1	GTU01-E	12-JAN-12	100 (100)	0.16	34
TFG-N	MTU02-E	10-JAN-12	100 (100)	0.11	32
TF406	PTU5-E	10-JAN-12	100 (100)	0.14	69
TF406-NW	GTU03-E	05-JAN-12	100 (100)	0.13	48
TF5475-2	GTU09-E	10-JAN-12	100 (100)	0.17	110

^aTest species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season ^a (December 1 - March 31)		NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled												
TFA													
TFA-E001	01-FEB-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFA-E													
STU06-E	04-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFA-W													
TFA-W-E	26-JAN-12	NA	<0.002	NA	<0.005	<0.01	<0.002	<0.0002	<0.005	NA	<0.01	NA	<0.05
TFB													
TFB-E002	08-MAR-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	0.016	<0.005	<0.005	<0.001	<0.01
TFC													
TFC-E003	05-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-E													
MTU1-E	18-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-SE													
PTU1-E	04-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD													
TFD-E004	04-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-E													
PTU8-E	04-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-S													
PTU2-E	12-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	0.014
TFD-SE													
PTU11-E	04-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-SS													
PTU12-E	11-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season^a		NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
(December 1 - March 31)													
Sample Station	Date Sampled												
TFD-W													
PTU6-E	10-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-E													
PTU3-E	05-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-HS													
GTU07-E	11-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-NW													
PTU9-E	10-JAN-12	<0.005	<0.005	<0.001	<0.001	0.017	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	0.038
TFE-SE													
MTU04-E	05-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-SW													
MTU03-E	12-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-W													
MTU05-E	11-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFG-1													
GTU01-E	12-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFG-N													
MTU02-E	10-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406													
PTU5-E	10-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406-NW													
GTU03-E	05-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF5475-2													
GTU09-E	10-JAN-12	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

	Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season ^a (December 1 - March 31)	NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled											

^aThe Explanation of Significant Differences for metals discharge identifies the Instantaneous Maximum concentrations for the wet season (December 1 - March 30).

NA = not applicable

Numbers in **BOLD** print indicate positive values above the detection limit.

Shaded values exceeded the discharge limit. See text for explanation.

Table A-7. Radiological analyses of effluent and receiving waters by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Gross Alpha <-	Gross Beta pCi/L	Tritium ->
TFA	TFA-E001	01-FEB-12	3.18	<3	<100
TFA-E	STU06-E	04-JAN-12	5.5	3.58	<100
TFB	TFB-E002	08-MAR-12	3.11	3.42	<100
TFB	TFB-R002	08-MAR-12	2.37	<3	<100
TFC	TFC-E003	05-JAN-12	4.04	<3	122
TFC	TFC-R003	05-JAN-12	3.13	4.01	125
TFC-E	MTU1-E	18-JAN-12	<2	<3	185
TFC-SE	PTU1-E	04-JAN-12	2.22	<3	285
TFD	TFD-E004	04-JAN-12	6.26	3.28	<100
TFD-E	PTU8-E	04-JAN-12	4.9	<3	<100
TFD-S	PTU2-E	12-JAN-12	7.45	4.15	161
TFD-SE	PTU11-E	04-JAN-12	4.46	3.73	245
TFD-SS	PTU12-E	11-JAN-12	8.03	4.69	150
TFD-W	PTU6-E	10-JAN-12	6.99	3.68	<100
TFE-E	PTU3-E	05-JAN-12	3.82	<3	<100
TFE-HS	GTU07-E	11-JAN-12	<2	8.6	<100
TFE-NW	PTU9-E	10-JAN-12	7.97	4.11	105
TFE-SE	MTU04-E	05-JAN-12	<2	<3	113
TFE-SW	MTU03-I	12-JAN-12	NA	NA	171
TFE-SW	MTU03-E	12-JAN-12	3.66	4.36	223
TFE-W	MTU05-E	11-JAN-12	6.11	10.5	<100
TFG-1	GTU01-E	12-JAN-12	7.79	3.92	216
TFG-1	TFG-ASW	12-JAN-12	4.53	<3	<100
TFG-N	MTU02-E	10-JAN-12	7.63	9.55	212
TF406	PTU5-E	10-JAN-12	<2	<3	<100
TF406-NW	W-1801	05-JAN-12	NA	NA	<100
TF406-NW	GTU03-E	05-JAN-12	8.56	3.82	<100
TF5475-1	W-1302-2	21-JAN-12	NA	NA	3570
TF5475-2	GTU09-E	10-JAN-12	2.46	7.44	399

Numbers in **BOLD** print indicate positive values above the detection limit.

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Haussmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

Explanation of Abbreviations

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

Attachment B

Self-Monitoring Reports

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	31																	
January	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>				

Total monthly time facility operated (hours): 745

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-10-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	526,800	25.0
W-262	100	0.0
W-408	512,700	12.9
W-415	1,720,300	39.0
W-457	504,400	24.0
W-518	197,400	4.5
W-522	681,800	17.7
W-605	391,600	9.2
W-614	389,800	9.1
W-712	301,300	7.0
W-714	343,600	7.9
W-903	765,500	18.3
W-904	772,900	36.9
W-1001	129,800	2.9
W-1004	509,800	11.9
W-1009	1,071,600	24.5
<hr/>		
Total:	<u>8,819,400</u>	<u>250.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,574,700</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

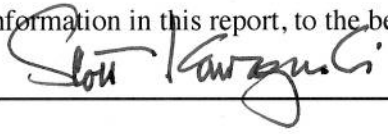
TFG-ASW

4,244,700

6. Comments:

Facility down on 12-30-11 due to I/O fault. Restarted on 1-2-12(except for W-109, W-457, and W-904). Restarted W-109, W-457, and W-904 on 1-18-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2012
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 18.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	1,048,700	25.0
W-262	0	0.0
W-408	429,600	10.2
W-415	1,582,300	38.9
W-457	1,005,300	24.0
W-518	184,100	4.4
W-522	540,200	12.9
W-605	363,900	8.9
W-614	362,800	8.6
W-712	268,100	6.5
W-714	322,300	7.8
W-903	636,300	14.9
W-904	1,535,800	37.1
W-1001	126,400	3.0
W-1004	474,800	11.6
W-1009	1,006,100	24.0
Total:	<u>9,886,700</u>	<u>237.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,628,900</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

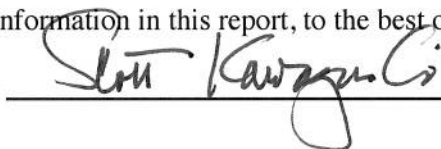
Arroyo Seco

TFG-ASW

5,257,800

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-29-2012

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 729

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-02-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>17.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	1,079,700	25.1
W-262	0	0.0
W-408	443,500	10.3
W-415	1,441,700	38.1
W-457	1,034,800	24.0
W-518	189,800	4.4
W-522	582,300	12.9
W-605	376,600	8.6
W-614	428,700	8.8
W-712	273,300	6.5
W-714	335,100	7.7
W-903	650,400	14.6
W-904	1,574,500	36.7
W-1001	163,100	3.0
W-1004	489,200	11.3
W-1009	1,037,700	24.0
Total:	<u>10,100,400</u>	<u>236.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,715,900</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

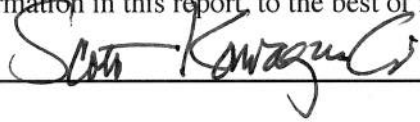
TFG-ASW

5,384,500

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 03-30-2012

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>17</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	31,549	0.9
Total:	<u>31,549</u>	<u>0.9</u>

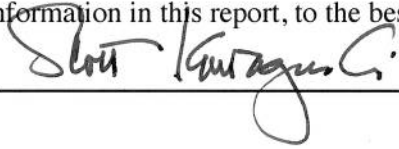
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>31,549</u>

6. Comments:

Flow rate adjusted to 0.5 gpm on 1-18-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 671

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-03-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 13.3

4. Wellfield Data:

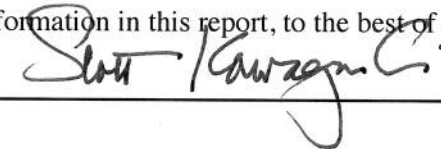
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	17,656	0.5
Total:	<u>17,656</u>	<u>0.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>17,656</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-29-2012

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 641

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 12

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	17,365	0.4
Total:	<u>17,365</u>	<u>0.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>17,365</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	04	05	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 735

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-10-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	247,800	6.2
W-610	266,800	6.0
W-620	236,800	5.5
W-621	301,700	6.8
W-655	280,500	6.0
W-704	727,600	18.3
W-1423	209,900	4.3
Total:	<u>2,271,100</u>	<u>53.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,271,100</u>

6. Comments:

Facility secured on 1-3-12 for electronic upgrades. Restarted on 1-6-12. Facility down on 1-26-12 due to low air stripper flow fault. Restarted on 1-27-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month January Year 2012

2. Date compliance sampling performed 01-10-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.13</u>
6-day total precipitation (in):	<u>0.01</u>
Average wind speed/direction (mph):	<u>4/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 02-06-2012

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February **01** **02** **03** **04** **05** **06** 07 08 **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **539**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **02-27-2012**
 Influent pH: **7.0**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **20.2**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	234,400	7.5
W-610	213,200	7.9
W-620	180,200	6.5
W-621	175,200	7.8
W-655	158,900	6.5
W-704	562,800	18.2
W-1423	164,200	4.4
W-2501	3,700	34.6
W-2502	800	7.9
Total:	<u>1,693,400</u>	<u>101.3</u>

5. Discharge Information:

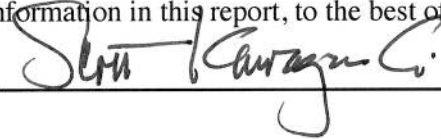
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,693,400</u>

6. Comments:

Secured on 2-6-12 for electronic upgrade. Restarted on 2-9-12. Down on 2-15-12 due to low air stripper flow fault. Restarted on 2-17-12. Secured W-621 and W-655 on 2-21-12 in preparation of bringing W-2501 and W-2502 on line. Ran W-2501 and W-2502 on 2-22-12 (First day). Secured system on 2-23-12 to remove discharge backflow preventer. Restarted on 2-24-12. System down on 2-26-12 due to low air stripper flow fault. Restarted on 2-27-12.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month February Year 2012

2. Date compliance sampling performed 02-27-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>12.03</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>5/ SSE</u>

4. Receiving Data:

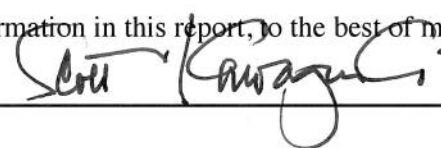
Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-19-2012

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** 04 **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **634**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-08-2012**
 Influent pH: **7.0**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **20**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	291,000	8.1
W-610	259,800	6.4
W-620	219,800	5.7
W-621	0	0.0
W-655	0	0.0
W-704	645,000	17.2
W-1423	197,700	4.9
W-2501	485,900	35.0
W-2502	176,000	7.9
Total:	<u>2,275,200</u>	<u>85.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,275,200</u>

6. Comments:

System down on 2-29-12 due to low air flow fault. Restarted on 3-1-12. Ran W-2501 and W-2502 on 3-1-12. Day 2 of operation compliance readings and samples taken. System down on 3-3-12 due to low air flow fault. Restarted on 3-5-12. System down on 3-6-12 due to low air flow fault. Restarted on 3-7-12. Started W-2501 and W-2502 in full time operation mode on 3-8-12. Day 3 compliance samples and readings taken. Weeks 2, 3, and 4 compliance samples

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

and readings taken on 3-14-12, 3-21-12, and 3-28-12 respectively.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel

1. Reporting Period: Business Month March Year 2012

2. Date compliance sampling performed 03-08-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.65</u>
6-day total precipitation (in):	<u>0.02</u>
Average wind speed/direction (mph):	<u>5/ SE</u>

4. Receiving Data:

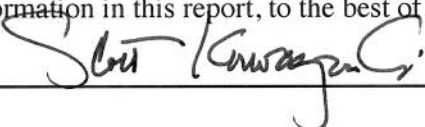
Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.5</u>	<u>22.1</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-05-2012

Self-Monitoring Report

LLNL Treatment Facility C (TFC)

AREA TFC

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 818

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-06-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>18.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	664,856	13.8
W-1015	213,508	4.7
W-1102	167,928	3.5
W-1103	116,823	2.6
W-1104	1,321,088	27.4
W-1116	91,349	1.9
Total:	<u>2,575,552</u>	<u>53.9</u>

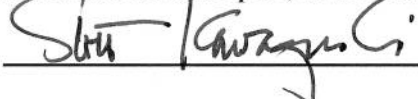
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,575,552</u>

6. Comments:

Removed lead ion exchange column from service, moved lag column to lead position, and installed new lag column on 1-23-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month January Year 2012

2. Date compliance sampling performed 01-06-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.47</u>
6-day total precipitation (in):	<u>0.01</u>
Average wind speed/direction (mph):	<u>3/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.0</u>	<u>10.0</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 02-06-2012

Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 704

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	560,688	13.6
W-1015	181,908	4.4
W-1102	140,416	3.4
W-1103	108,466	2.6
W-1104	1,139,392	27.6
W-1116	79,174	1.9
Total:	<u>2,210,044</u>	<u>53.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,210,044</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 02-29-2012

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month February Year 2012

2. Date compliance sampling performed 02-01-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.93</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>3/ SSE</u>

4. Receiving Data:

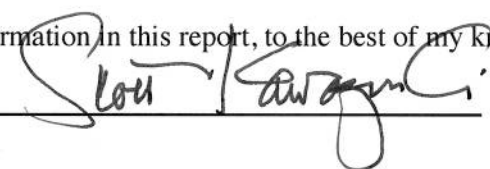
Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-19-2012

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 729

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	591,360	13.6
W-1015	194,452	4.4
W-1102	161,550	3.4
W-1103	113,719	2.5
W-1104	1,177,712	27.2
W-1116	81,263	1.9
Total:	<u>2,320,056</u>	<u>53.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,320,056</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month March Year 2012

2. Date compliance sampling performed 03-05-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.99</u>
6-day total precipitation (in):	<u>0.17</u>
Average wind speed/direction (mph):	<u>6/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 04-05-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 381

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-18-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	80,010	3.5
W-413	377,361	16.5
Total:	<u>457,371</u>	<u>20.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>457,371</u>

6. Comments:

Facility was down waiting for resin delivery. Facility was restarted at 1100 hrs on 1-14-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-06-2012

Operator Signature: *Amir H. V. Nay* Date: **02-29-2012**

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 25.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	141,919	3.6
W-413	666,031	16.5
Total:	<u>807,950</u>	<u>20.1</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>807,950</u>

6. Comments:

Facility was started at 10:15 On 3-1-12 and end month reading were taken at 08:25 on 3-29-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 823

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	280,128	6.2
W-2201	586,977	12.1
Total:	<u>867,105</u>	<u>18.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>867,105</u>

6. Comments:

W-1213 flow rate adjusted to 5.5 gpm on 1-18-12. New ion exchange columns installed on 1-27-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 705

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 20.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	229,915	5.5
W-2201	503,975	12.0
Total:	<u>733,890</u>	<u>17.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>733,890</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karaguzian Date: 02-29-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 729

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-05-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.5</u>

4. Wellfield Data:

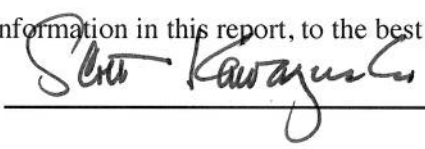
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	227,338	5.6
W-2201	520,943	12.0
Total:	<u>748,281</u>	<u>17.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>748,281</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 822

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	56,200	1.2
W-653	0	0.0
W-906	200,300	4.1
W-907-2	479,100	9.9
W-2011	0	0.0
W-2101	13,000	3.0
W-2102	0	0.0
W-1206	184,700	3.8
W-1208	1,091,400	22.3
Total:	<u>2,024,700</u>	<u>44.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,024,700</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **667**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **02-03-2012**
 Influent pH: **7.0**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **19.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	45,500	1.1
W-653	1,300	4.0
W-906	164,000	4.1
W-907-2	397,900	9.0
W-2011	0	0.0
W-2101	9,200	3.0
W-2102	0	0.0
W-1206	151,100	3.9
W-1208	883,700	22.4
Total:	<u>1,652,700</u>	<u>47.5</u>

5. Discharge Information:

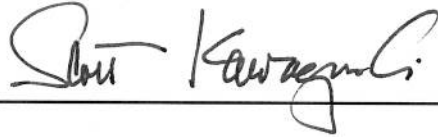
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,652,700</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

Started W-653 in cyclic mode on 2-23-12. Facility down on 2-26-12 due to high manifold air pressure fault. Restarted on 2-27-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature:  Date: 02-29-2012

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 631

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2012
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	44,100	1.2
W-653	5,500	2.5
W-906	166,300	4.2
W-907-2	402,200	11.0
W-2011	12,700	1.2
W-2101	8,900	1.5
W-2102	14,600	3.0
W-1206	60,200	3.9
W-1208	881,300	22.3
Total:	<u>1,595,800</u>	<u>50.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,595,800</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

Facility secured on 3-2-12 for planned power outage. Restarted on 3-5-12. Facility secured on 3-29-12 for air stripper maintenance.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature: Scott Kawaguchi Date: 03-30-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 780

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.3</u>

4. Wellfield Data:


<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	0	0.0
W-1301	0	0.0
W-1303	81,629	1.6
W-1306	0	0.0
W-1307	283,665	6.0
W-1404	0	0.0
W-1550	0	0.0
W-2203	18,962	0.5
Total:	<u>384,256</u>	<u>8.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>384,256</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-06-2012

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>																			
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>						

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1306	0	0.0
W-1307	258,648	6.0
W-1550	0	0.0
W-2203	16,187	0.5
W-2006	0	0.0
W-1301	0	0.0
W-1303	68,665	1.3
Total:	<u>343,500</u>	<u>7.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>343,500</u>

6. Comments:

W-1404 has been removed from service. W-1404 is dry (HSU 2 water levels remain below the well's screened interval) and can no longer be used as an extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-29-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06**

Total monthly time facility operated (hours): **146**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-05-2012**

Influent pH: **7.0**

Effluent pH: **7.5**

Effluent Temperature (°C): **20.1**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	0	0.0
W-1301	0	0.0
W-1303	13,895	1.7
W-1306	0	0.0
W-1307	52,141	6.0
W-1550	0	0.0
W-2203	3,303	0.3
Total:	<u>69,339</u>	<u>8.0</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>69,339</u>

6. Comments:

Facility was secured at 08:50 on 3-6-12 for facility and well upgrades.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2012**

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

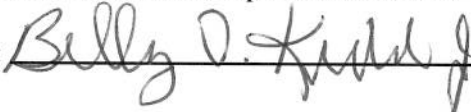
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

The facility remained off during the month so as not to interfere with the bioremediation treatability test underway at this location.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:



Date: **02-09-2012**

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

The facility remained off during the month so as not to interfere with the bioremediation treatability test underway at this location.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 03-09-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 27

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-08-2012</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>23.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	1,857	5.4
Total:	<u>1,857</u>	<u>5.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,857</u>

6. Comments:

The facility was restarted on 3-8-12 at 1010. The facility will run on a continuous basis once an interlock check and wellhead development work has been completed.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 04-06-2012

Self-Monitoring Report

LLNL ISB01 (ISB01)

AREA TFD-HPD

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31														
January	01	02	03	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	14	15		
	16	17	18	<u>19</u>	<u>20</u>	21	22	<u>23</u>	24	25	26	27	28	29	30	31	

Total monthly time facility operated (hours): 210

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	204	0.1
W-1653	58	0.0
W-1655	500	0.1
W-1657	1,473	0.2
 Total:	<hr/> <u>2,235</u>	<hr/> <u>0.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>2,235</u>

6. Comments:

The facility shut down several times and was down for several days due to high water level in W-1552 due to biofouling. Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but it was not treated. The recorded flowrate readings were taken when the facility was running in the lactate injection mode. One-hundred and seventy- one gallons of facility water were diverted to the pre-mixing tank and was not immediately injected into W-1552. The facility did not operate from 1-24-12 to the end of the month to allow the EE support team to make upgrades to the facility.

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** 25 26 27 **28** **29**

Total monthly time facility operated (hours): 506

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	2,188	0.1
W-1653	564	0.1
W-1655	729	0.2
W-1657	2,073	0.2
Total:	<u>5,554</u>	<u>0.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>5,554</u>

6. Comments:

The facility shut down several times due to high water levels in W-1552 due to biofouling. Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but it was not treated. The recorded flowrate readings were taken when the facility was running in the lactate injection mode. The facility was shut down on 2-24-12 at 1616 because of a high pressure reading at the inlet of the Dosatron. The facility was restarted on 2-28-12 at 0926.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy J. Kuhl Date: 03-14-2012

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 499

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	532	0.1
W-1653	211	0.1
W-1655	346	0.2
W-1657	1,006	0.2
Total:	<u>2,095</u>	<u>0.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>2,095</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but it was not treated. The recorded flowrate readings were taken when the facility was running in the lactate injection mode. The facility has been running in a cyclic mode since 02-3-12. Approximately 175 gallons of facility water were diverted to the pre-mixing tank and was not immediately injected into W-1552. The facility was shut down at different times and was also down for several days to perform repair work.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																
January	<u>01</u>	<u>02</u>	<u>03</u>	04	05	<u>06</u>	<u>07</u>	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 703

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-12-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	382,128	9.7
W-1504	323,800	7.8
W-1510	175,812	5.0
Total:	<u>881,740</u>	<u>22.4</u>

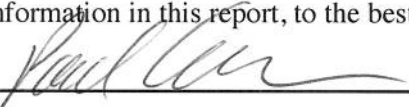
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>881,740</u>

6. Comments:

System secure from 1/3/12 to 1/6/12 and 1/7/12 to 1/9/12 for electronic trouble shooting and repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 648

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-07-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	365,568	9.5
W-1504	298,862	7.8
W-1510	192,456	5.0
Total:	<u>856,886</u>	<u>22.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>856,886</u>

6. Comments:

System secure from 2/4/12 to 2/6/12 due to power outage.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-01-2012**

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 431

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-13-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	236,104	9.2
W-1504	200,164	7.9
W-1510	129,558	5.0
Total:	<u>565,826</u>	<u>22.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>565,826</u>

6. Comments:

All system down time caused by discharge pump contactor failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 790

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.9</u>

4. Wellfield Data:


<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	442,446	10.2
W-2005	0	0.0
W-1308	131,426	3.0
W-1403	51,035	1.1
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>624,907</u>	<u>14.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>624,907</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-06-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-07-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	417,154	10.0
W-2005	0	0.0
W-1308	123,564	3.0
W-1403	46,956	1.3
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>587,674</u>	<u>14.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>587,674</u>

6. Comments:

Facility was down on 2-17-12 for a few hours due to facility low flow interlock.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-29-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): 700

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	425,619	10.1
W-2005	0	0.0
W-1308	136,248	3.0
W-1403	54,891	1.1
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>616,758</u>	<u>14.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>616,758</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 823

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-11-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.8

4. Wellfield Data:

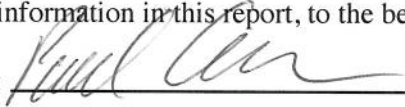
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	336,071	6.8
W-1601	51,586	1.1
W-1602	243,682	5.0
W-1603	681,924	14.0
Total:	<u>1,313,263</u>	<u>26.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,313,263</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 703

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-07-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.6

4. Wellfield Data:

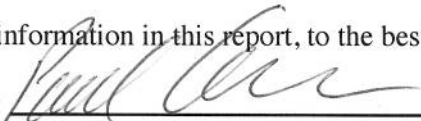
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	285,562	6.9
W-1601	42,943	1.0
W-1602	188,163	4.9
W-1603	578,961	13.8
Total:	<u>1,095,629</u>	<u>26.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,095,629</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report

LLNL Portable Treatment Unit 12 (PTU12)

AREA TFD-SS

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 726

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-13-2012
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	292,531	6.8
W-1601	43,729	1.0
W-1602	175,892	4.1
W-1603	595,135	13.8
Total:	<u>1,107,287</u>	<u>25.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,107,287</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 823

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-10-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	465,677	9.5
W-1216	507,934	10.3
W-1902	887,177	18.3
Total:	<u>1,860,788</u>	<u>38.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,860,788</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty J. Kuchel Date: 02-09-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 704

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	397,890	9.4
W-1216	434,976	10.5
W-1902	760,014	18.2
Total:	<u>1,592,880</u>	<u>38.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,592,880</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kunkel Date: 03-09-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 24.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	421,274	9.7
W-1216	442,663	10.2
W-1902	786,946	18.2
Total:	<u>1,650,883</u>	<u>38.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,650,883</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy J. Kunkel Date: 04-05-2012

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	24	25	26	27	28	29	30	31													
January	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	447,693	10.9	-.87	54	828
W-ETC-2004A	103,969	2.9	-4.05	54	828
W-ETC-2004B	680,260	17.1	-3.45	54	828
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>1,231,922</u>	<u>30.9</u>			

4. Comments:

Facility secured 1/23 to 1/3/12 to prevent damage to unit from freezing temperatures expected during extended holiday week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2012

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	389	0.0	0	0	1
W-ETC-2003	511,779	12.8	-.94	56	702
W-ETC-2004A	171,350	3.4	-4.83	56	702
W-ETC-2004B	704,456	16.8	-3.92	56	702
SIP-ETC-201	363	0.0	0	0	1
Total:	<u>1,388,337</u>	<u>33.0</u>			

4. Comments:

Installed condensate purge system 2/2/12 to minimize the effect of condensate on facility instrumentation.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

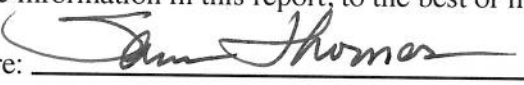
3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	493,740	13.6	-1.02	56	641
W-ETC-2004A	163,800	4.1	-5.37	56	641
W-ETC-2004B	694,765	18.5	-4.35	56	641
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>1,352,305</u>	<u>36.2</u>			

4. Comments:

Extraction well end month totals and monthly hours of operation have been adjusted due to facility and well field totalizers accumulating while facility was not operating. Facility shutdown 3/17/2012 @ 01:12 hrs due to high condensate tank level alarm. Facility was restarted 3/19 at 14:43 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-04-2012

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	29	30	31													
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:					
	<u>0</u>	<u>0.0</u>			

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-30-2012**

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-28-2012

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February	29																
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27	28	29			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 802

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-05-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	404,313	8.5
W-1109	0	0.0
W-1903	43,714	1.5
W-1909	0	0.0
W-2305	122	0.6
Total:	<u>448,149</u>	<u>10.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>448,149</u>

6. Comments:

Facility shutdown 1/17/12 caused by the flooding of W-1109 vault as new well pump was being installed. Facility was restarted @ 14:50 hrs. Facility was secured 1/18/12 @ 13:30 hrs. to facilitate electrical work at W-1901. Facility was restarted 1/19/12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	167,430	8.5
W-1109	64,281	1.6
W-1903	46,758	1.5
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>278,469</u>	<u>11.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>278,469</u>

6. Comments:

W-566 was offline from 2/2/12 to 2/17/12 due to failed groundwater pump.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-01-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 705

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	355,851	8.5
W-1109	64,139	1.5
W-1903	36,423	1.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>456,413</u>	<u>11.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>456,413</u>

6. Comments:

Facility shutdown 3/25 @ 5:00 hrs due to rain water collecting in W-1109 vault which triggered the leak detection alarm. Vault was evacuated 3/26 and facility restarted.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	24	25	26	27	28	29	30	31									
January	01	02	03	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 615

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-11-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>16</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	183	0.7
Total:	<u>183</u>	<u>0.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>183</u>

6. Comments:

Facility drained and secured 12/23/11 to 1/4/12 to prevent freezing of extraction lines over extended holiday week. Prior to restarting unit, facility totalizers were zeroed. Facility secured 1/10/12 @ 14:25 hrs. to allow well level to increase, providing available drawdown to facilitate monthly/quarterly/annual sample collection. Facility was restarted 1/11/12 @ 10:10 hrs. Facility operations were interrupted 1/22/12, a result of a planned power outage. Facility was restarted 1/23/12 @ 12:40 hrs. W-2105 operates cyclically. As a result, flow rate, flow volume and hours of operation do not correspond.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Hanna Date: 02-03-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 12.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	148	2.9
Total:	<u>148</u>	<u>2.9</u>

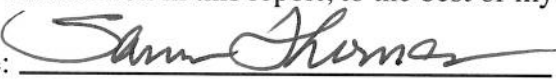
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>148</u>

6. Comments:

W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond. The decline in monthly volume for the reporting month can be partially attributed to failure of VES 12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **680**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-06-2012**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **14.3**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	288	2.4
Total:	<u>288</u>	<u>2.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>288</u>

6. Comments:

W-2105 secured 3/5/12 in preparation for monthly sample collection. Facility was restarted 3/6/12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-05-2012**

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 825

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-10-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	310,027	6.3
W-1409	113,206	2.3
Total:	<u>423,233</u>	<u>8.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>423,233</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	258,969	6.3
W-1409	97,256	2.3
Total:	<u>356,225</u>	<u>8.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>356,225</u>

6. Comments:

An estimated 70 gallons of water from W-1409 was released to ground on 2/29/12 due to influent line pipe break. Repairs made and system restarted the same day.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-13-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	278,895	6.5
W-1409	102,722	2.4
Total:	<u>381,617</u>	<u>8.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>381,617</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 814

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-05-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>23.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	414,874	8.4
Total:	<u>414,874</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>414,874</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 699

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.5

4. Wellfield Data:

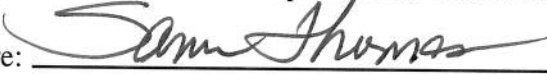
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	355,735	8.4
Total:	<u>355,735</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>355,735</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 709

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22

4. Wellfield Data:

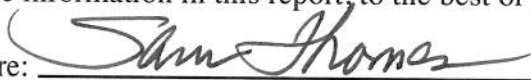
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	358,010	8.4
Total:	<u>358,010</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>358,010</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report

LLNL Mini Treatment Unit 03 (MTU03)

AREA TFE-SW

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 763

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-12-2012</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1518	61,317	1.5
W-1520	26	1.2
W-1522	64	1.7
<hr/>		
Total:	<u>61,407</u>	<u>4.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>61,407</u>

6. Comments:

The facility was down on 1-19-12 at 1155 (19.9 hrs.), and it was restarted on 1-20-12 at 0749. The facility was down due to a W-1518 low flow interlock fault. The facility was down on 1-22-12 at 0700 (27.6 hrs.), and it was restarted on 1-23-12 at 1036. The facility was down due to a power outage at bldg. 438,

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy I. Krule Date: 02-13-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 695

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 16.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1518	39,434	0.9
W-1520	0	0.0
W-1522	0	0.0
Total:	<u>39,434</u>	<u>0.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>39,434</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 03-09-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 716

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 16.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1518	39,160	0.9
W-1520	0	0.0
W-1522	0	0.0
Total:	<u>39,160</u>	<u>0.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>39,160</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy V. Kuhl Date: 04-05-2012

Operator Signature: Billy T. Kidd Date: 02-09-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	239,221	5.7
W-305	357,612	8.6
Total:	<u>596,833</u>	<u>14.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>596,833</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Smith Date: 03-09-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 710

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	256,344	6.0
W-305	436,304	10.0
Total:	<u>692,648</u>	<u>16.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>692,648</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kunkel Date: 04-05-2012

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	24	25	26	27	28	29	30	31									
January	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	28	29	30	<u>31</u>	


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	46,867	1.4	-15.65	52	549
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	643,952	21.6	-1	52	549
W-543-1908	0	0.0	0	0	0
Total:	<u>690,819</u>	<u>22.9</u>			

4. Comments:

Facility secured 12/23/11 to 1/3/12 to prevent probable damage to unit due to anticipated freezing conditions and unattended operation over extended holiday week. Facility shutdown 1/17/12 caused by interlock at W-1109 during groundwater pump replacement. Facility was restarted 1/17 @ 15:10 hrs. Facility shutdown 1/27/12 @ 06:00 hrs and contributed to excessive accumulation of operating liquid in blower reservoir and collection tank. Facility was restarted 1/31 @ 13:25 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2012

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1903	78,508	2.0	-18	71	693
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	916,302	22.5	-1.4	71	693
W-543-1908	0	0.0	0	0	0
Total:	<u>994,810</u>	<u>24.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-01-2012

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 17 18 **19** **20** **21** **22** **23** **24** 25 26 **27** **28** **29** **30**

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	68,178	1.9	-18	68	627
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	832,844	22.0	-1	68	627
W-543-1908	0	0.0	0	0	0
Total:	<u>901,022</u>	<u>23.9</u>			

4. Comments:

Facility shutdown 3/16/12, a result of high discharge/high condensate level.
 Facility was restarted 3/19 @ 10:05 hrs. Facility shutdown 3/25/12 due to
 rainwater filling W-1109 containment and activating leak detection alarm. Water
 was removed and facility was restarted 3/27/12 @ 07:40 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2012

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	24	25	26	27	28	29	30	31										
January	01	02	03	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>			
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	21	22	23	24	25	26	27	28	29	30	31		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	28,331	1.3	-2.56	58	363
W-ETS-2008A	2,908	0.0	0	0	2
W-ETS-2008B	152,098	6.4	-2.52	58	363
W-ETS-2009	714	0.0	0	0	1
W-ETS-2010A	1,006	0.0	0	0	8
W-ETS-2010B	315,295	13.8	-1.45	58	363
 Total:	 <u>500,352</u>	 <u>21.5</u>			

4. Comments:

Facility secured 12/23/11 to 1/4/12 as a safeguard against anticipated freezing conditions during extended holiday week. Facility discovered shutdown 1/6/12 due to high level on condensate tank. Facility was restarted 1/6 @ 14:10 hrs. Several flow matrix tests were performed in the TFE-HS area using VES 12 to evaluate pre and post mechanical fracturing conditions in the subsurface. Therefore, month end volumes for extraction wells and monthly hours of operation may not correlate. VES 12 was discovered inoperable 1/20/12. Tests conducted by EE group confirmed unit experienced catastrophic failure.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2012

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 **15**
 16 **17** **18** **19** **20** **21** **22** 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	8,657	1.2	-2.38	54	169
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	68,977	8.1	-2.23	54	169
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	162,156	16.5	-2.14	51	169
Total:	<u>239,790</u>	<u>25.8</u>			

4. Comments:

Installed rebuilt vacuum unit 2/11/12, system began vacuum extraction 2/15/12.
 Facility was discovered shutdown 2/22/12 @ 13:00 hrs. due to motor overload,
 and was offline at recording of month end readings.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-14-2012

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	39,201	0.3	-1.97	50	656
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	515,045	6.7	-1.8	50	656
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	69,604	9.8	-1.42	50	395
Total:	<u>623,850</u>	<u>16.9</u>			

4. Comments:

Facility shutdown 3/4/12 at 05:08 hrs due to low discharge separator alarm. Operating liquid was added to blower reservoir and facility was restarted 3/5/12 at 07:39 hrs. Facility shutdown 3/25/12 at 17:30 hrs. due to low discharge separator level alarm. Operating liquid was added to blower reservoir and facility was restarted 3/26/12 @ 09:00 hrs. W-ETS-2010B secured 3/7/12.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-05-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 814

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-12-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.5</u>

4. Wellfield Data:

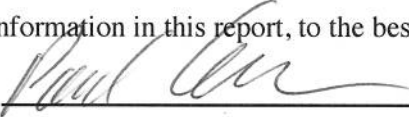
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	407,192	8.4
Total:	<u>407,192</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>407,192</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month January Year 2012

2. Date compliance sampling performed 01-12-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.81</u>
6-day total precipitation (in):	<u>0.01</u>
Average wind speed/direction (mph):	<u>4/ ESE</u>

4. Receiving Data:

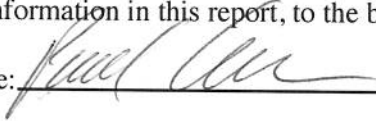
Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>7.0</u>	<u>19.1</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 693

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-06-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	366,208	7.8
Total:	<u>366,208</u>	<u>7.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>366,208</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month February Year 2012

2. Date compliance sampling performed 02-06-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.29</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>3/ SE</u>

4. Receiving Data:

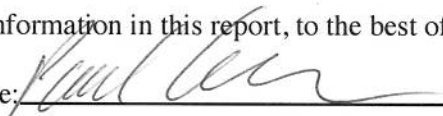
Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-15-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	387,368	9.0
Total:	<u>387,368</u>	<u>9.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>387,368</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month March Year 2012

2. Date compliance sampling performed 03-15-2012

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.8</u>
6-day total precipitation (in):	<u>0.03</u>
Average wind speed/direction (mph):	<u>6/ SSW</u>

4. Receiving Data:

Sample <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-10-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 825

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-10-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	146,052	3.0
W-1807	239,446	4.9
Total:	<u>385,498</u>	<u>7.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>385,498</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 703

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-06-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	124,108	3.0
W-1807	202,990	4.9
Total:	<u>327,098</u>	<u>7.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>327,098</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 727

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-15-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	128,356	3.0
W-1807	200,945	4.9
Total:	<u>329,301</u>	<u>7.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>329,301</u>

6. Comments:

W-1807 well pump removed on 3/29/12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 822

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-10-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	215,392	4.4
W-1310	653,698	13.4
Total:	<u>869,090</u>	<u>17.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>869,090</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 02-09-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 705

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	182,815	4.4
W-1310	563,956	13.7
Total:	<u>746,771</u>	<u>18.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>746,771</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 03-09-2012

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 727

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-08-2012
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	186,376	4.5
W-1310	432,510	10.0
Total:	<u>618,886</u>	<u>14.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>618,886</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy O. Kunkel Date: 04-05-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 791

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-05-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	177,330	3.6
Total:	<u>177,330</u>	<u>3.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>177,330</u>

6. Comments:

System secured on 1/18/12 to remove first carbon in series from service. Fresh carbon placed in the effluent position and other two carbons rotated up in series. System restarted on 1/19/12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 693

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	153,474	3.8
Total:	<u>153,474</u>	<u>3.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>153,474</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 716

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-14-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	144,953	3.4
Total:	<u>144,953</u>	<u>3.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>144,953</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-30-2012

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31														
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 01-30-2012

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27	28				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

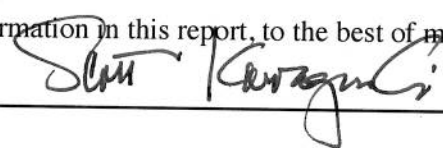
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-28-2012**

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 29
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 03-29-2012

Self-Monitoring Report

LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)

AREA TF518-PZ

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	24	25	26	27	28	29	30	31									
January	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	83	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	30	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>113</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>113</u>

6. Comments:

Facility operations secured 12/23/11 in advance of extended holiday week.
 Facility operations resumed 1/3/12. W-1615 pneumatic pump installed and
 groundwater extraction restarted 1/9/12. Transferred 674 gallons of groundwater
 from this facility to TFB main for treatment 1/20/12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-01-2012

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 697

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	159	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	44	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>203</u>	<u>0.0</u>

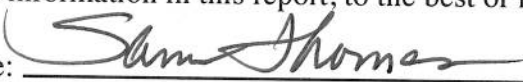
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>203</u>

6. Comments:

End month volumes entered for W-1615 may not be accurate, a result of sand/silt being extracted from well causing erratic groundwater totalizer operation. Groundwater extracted from this facility is treated at TFB main, therefore compliance sampling is not required.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-01-2012**

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	96	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	54	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>150</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>150</u>

6. Comments:

End month volumes entered for W-1615 may not be accurate, a result of sand/silt being extracted from well causing erratic groundwater totalizer operation. Groundwater extracted from this facility is treated at TFB main, therefore compliance sampling is not required.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: 04-02-2012

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy J. Kilduff Date: 02-09-2012

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhn Date: 03-09-2012

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty O. Kuchel Date: 04-05-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 756

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-10-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	195,048	4.0
W-1415	0	0.0
Total:	<u>195,048</u>	<u>4.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>195,048</u>

6. Comments:

Facility was secured at 0800 hrs. on 1-7-12 for carbon change out and restarted at 0800hrs. on 1-9-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-06-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	193,813	4.5
W-1415	0	0.0
Total:	<u>193,813</u>	<u>4.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>193,813</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-29-2012

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.1

4. Wellfield Data:


<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	168,467	4.0
W-1415	0	0.0
Total:	<u>168,467</u>	<u>4.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>168,467</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2012

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty D. Kunkel Date: 02-09-2012

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuntz Date: 03-09-2012

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhn Date: 04-05-2012

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	24	25	26	27	28	29	30	31													
January	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

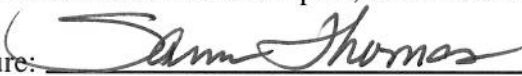
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	620,267	15.7	-3.17	51	691
W-514-2007A	0	0.0	0	0	0
W-514-2007B	409,561	11.1	-3.51	51	691
Total:					
	<u>1,029,828</u>	<u>26.8</u>			

4. Comments:

Facility secured 12/23/11 to protect unit due to predicted low ambient temperatures over extended holiday week. Facility was reactivated 1/3/12. Due to condensate affecting operation of facility instrumentation, end month volumes entered for reporting month may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-15-2012

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	636,848	15.2	-3.1	68	709
W-514-2007A	0	0.0	0	0	0
W-514-2007B	339,782	12.9	-3.44	68	709
Total:	<u>976,630</u>	<u>28.1</u>			

4. Comments:

Due to condensate accumulating and intermittently disrupting operation of facility instrumentation, end month volumes entered for reporting month may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-14-2012

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	620,033	14.5	-2.97	54	716
W-514-2007A	0	0.0	0	0	0
W-514-2007B	425,159	10.7	-3.27	54	716
Total:	<u>1,045,192</u>	<u>25.2</u>			

4. Comments:

End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 04-05-2012

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

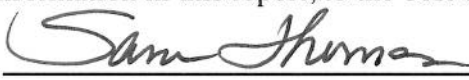
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	218,620	6.0	-6	54	815
W-2208A	0	0.0	0	0	0
W-2208B	396,498	7.8	-5.3	54	815
Total:	<u>615,118</u>	<u>13.9</u>			

4. Comments:

Due to condensate intermittently disrupting operation of facility instrumentation, extraction well end month cumulative volumes entered for reporting month may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2012

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	217	0.0	0	0	0
W-2207B	238,083	7.1	-5.9	50	701
W-2208A	357	0.0	0	0	0
W-2208B	292,924	7.1	-5.3	50	701
Total:	<u>531,581</u>	<u>14.2</u>			

4. Comments:

Frequent accumulation of condensate disrupt operation of flow and pressure instrumentation at this facility. Therefore end month cumulative volumes entered for operating extraction wells may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-01-2012

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	261,591	6.3	-5.6	60	710
W-2208A	0	0.0	0	0	0
W-2208B	281,598	6.8	-5	60	710
Total:	<u>543,189</u>	<u>13.0</u>			

4. Comments:

Frequent accumulation of condensate disrupted operation of flow and pressure instrumentation at this facility. Therefore end month cumulative volumes entered for operating extraction wells may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2012

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month January Week: 1 Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	24	25	26	27	28	29	30	31
January	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>		

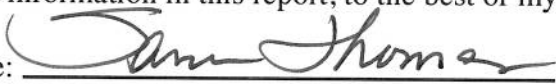
3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	4,719	1.1	-26.5	58	72
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>4,719</u>	<u>1.1</u>			

4. Comments:

Facility operations secured 12/23/11 in advance of extended holiday week.
Operations resumed 1/3/12. W-1615 vapor extraction discontinued due to
accumulation of sediment in well casing.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January **Week: 2** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

January **07** **08** **09** **10** **11** **12** **13**

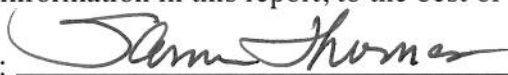
3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	28,325	2.8	-21	48	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	10,116	1.0	-22	48	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>38,441</u>	<u>3.8</u>			

4. Comments:

W-1615 vapor extraction operations restarted 1/9/12.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-03-2012**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: 3 Year 2012

2. Dates (in **bold** and underline) treatment facility operated

January **14** **15** **16** **17** **18** **19** **20**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	30,582	3.0	-20.5	50	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	10,194	1.0	-21.8	50	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>40,776</u>	<u>4.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January **Week: 4** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

January **21** **22** **23** **24** **25** **26** **27**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	31,872	3.2	-21	56	166
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,960	1.0	-21	56	166
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>41,832</u>	<u>4.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 1 Year 2012

2. Dates (in **bold** and underline) treatment facility operated

January 28 29 30 31
February 01 02 03

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	33,403	3.3	-20.5	50	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,110	0.9	-21.5	50	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>42,513</u>	<u>4.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-01-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 2 Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February **04** **05** **06** **07** **08** **09** **10**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	34,333	3.4	-20	46	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,088	0.9	-21.5	46	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>43,421</u>	<u>4.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February **Week: 3** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

February **11** **12** **13** **14** **15** **16** **17**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	34,129	3.4	-20.5	43	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,034	0.9	-21.6	43	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>43,163</u>	<u>4.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-01-2012**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 4 Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February **18** **19** **20** **21** **22** **23** **24**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	33,026	3.3	-20	50	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,007	0.9	-21	50	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>42,033</u>	<u>4.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 1** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

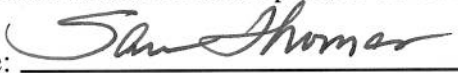
February **25** **26** **27** **28** **29**
March **01** **02**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	34,170	3.4	-20.2	40	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,045	0.9	-21.7	40	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>43,215</u>	<u>4.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2012**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 2** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

March 03 04 05 06 07 08 09

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	35,091	3.5	-20	39	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,023	0.9	-21	39	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>44,114</u>	<u>4.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2012**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 3** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated


March **10** **11** **12** **13** **14** **15** **16**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	36,245	3.6	-19.7	52	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,061	0.9	-21	52	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>45,306</u>	<u>4.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2012**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 4** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

March **17** **18** **19** **20** **21** **22** **23**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	37,340	3.7	-19.2	38	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,074	0.8	-20	38	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>45,414</u>	<u>4.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2012

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 5** Year **2012**

2. Dates (in **bold** and underline) treatment facility operated

March **24** **25** **26** **27** **28** **29** **30**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	37,318	3.7	-19.8	50	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,069	0.8	-21.5	50	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>45,387</u>	<u>4.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2012

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month January Year 2012

2. Dates (in **bold** and underline) treatment facility operated

December	29	30	31																		
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15						
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

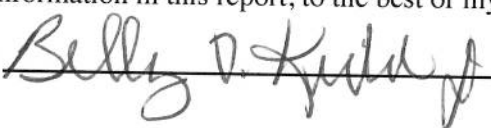
4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-09-2012**

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month February Year 2012

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kukulj Date: 03-09-2012

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month March Year 2012

2. Dates (in **bold** and underline) treatment facility operated

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Betty D. Kunkin* Date: **04-05-2012**

Attachment C

Figures

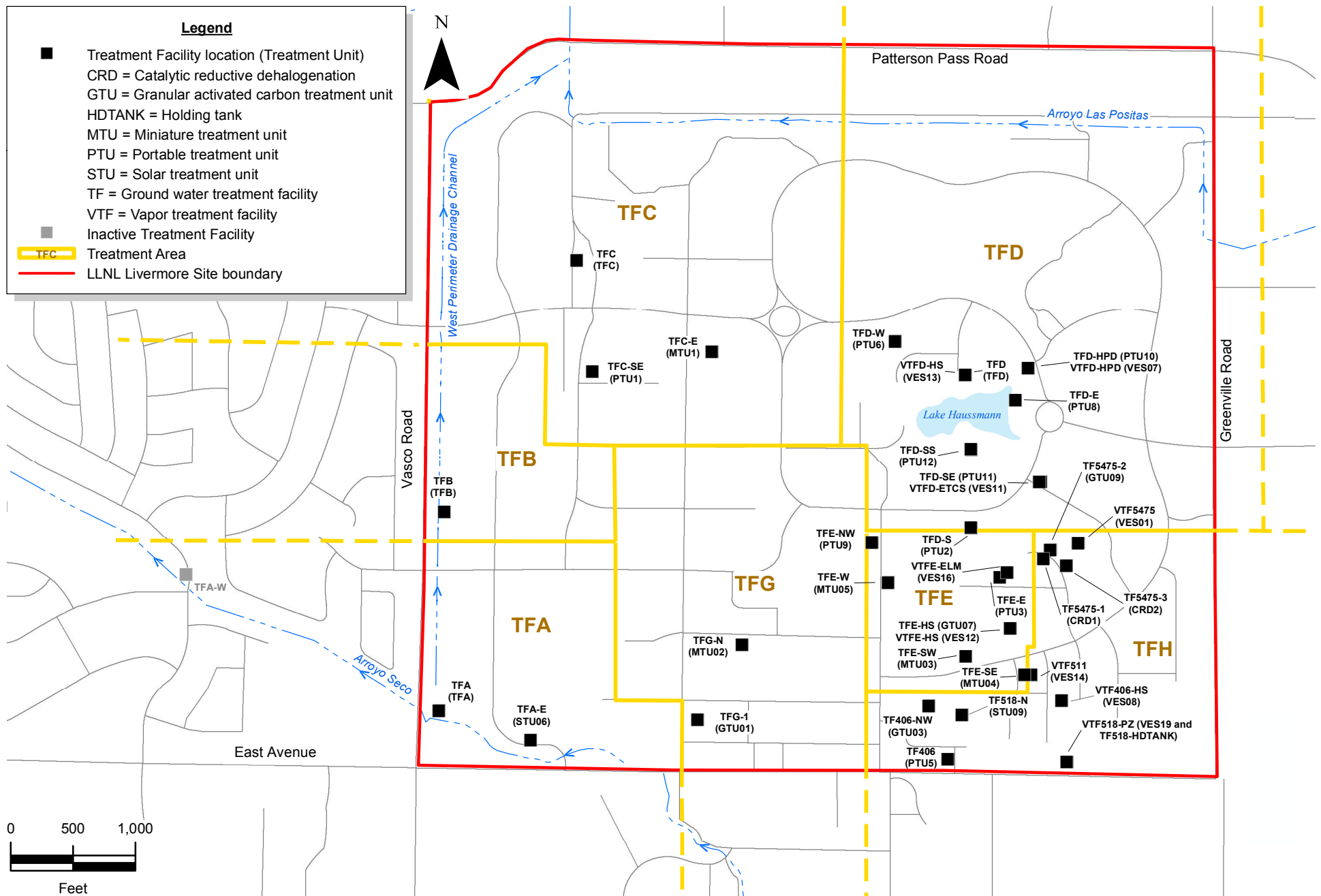


Figure 1. Livermore Site treatment areas and treatment facility locations.

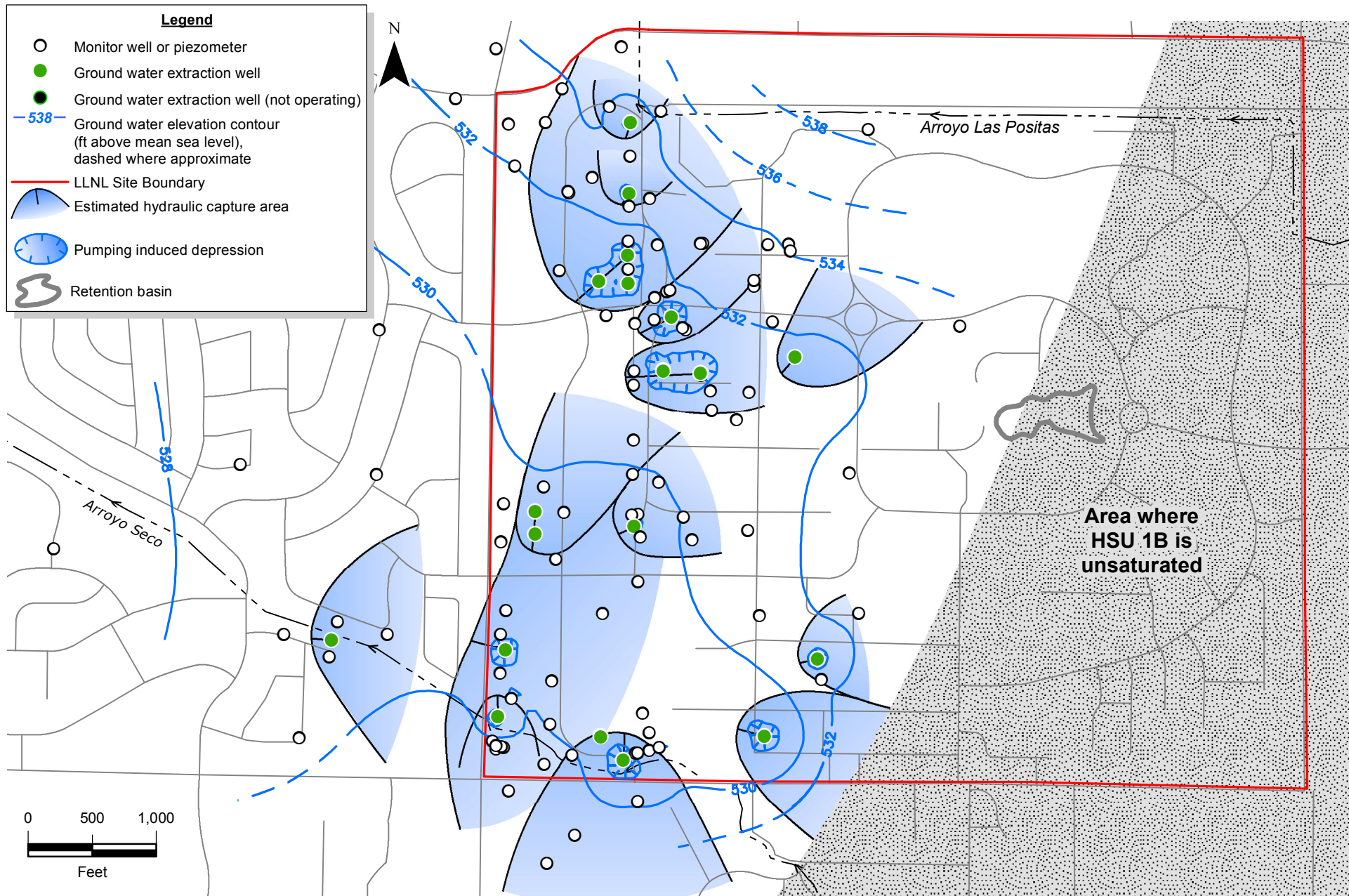


Figure 2. Ground water elevation contour map based on 118 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2012.

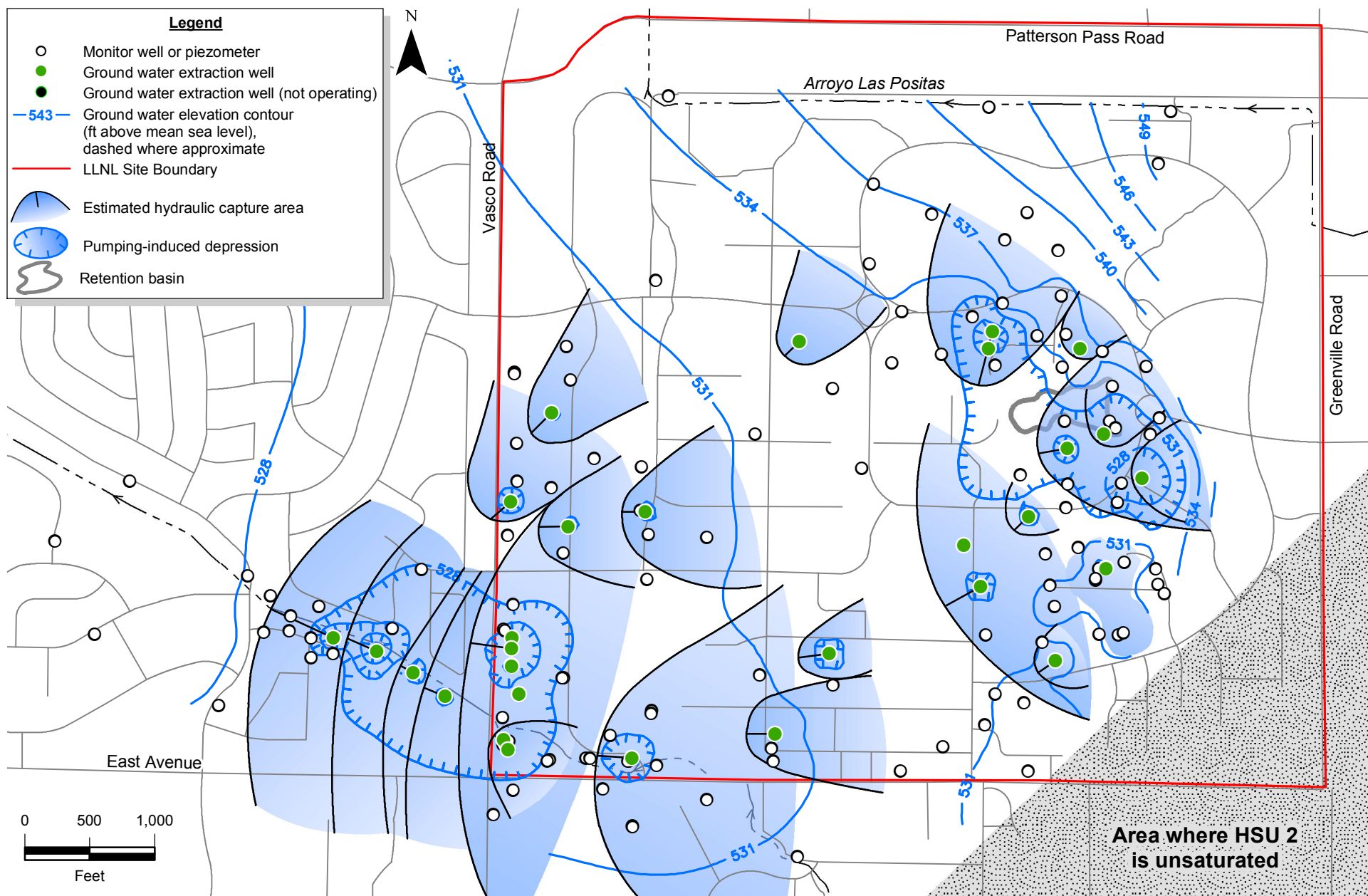


Figure 3. Ground water elevation contour map based on 153 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2012.

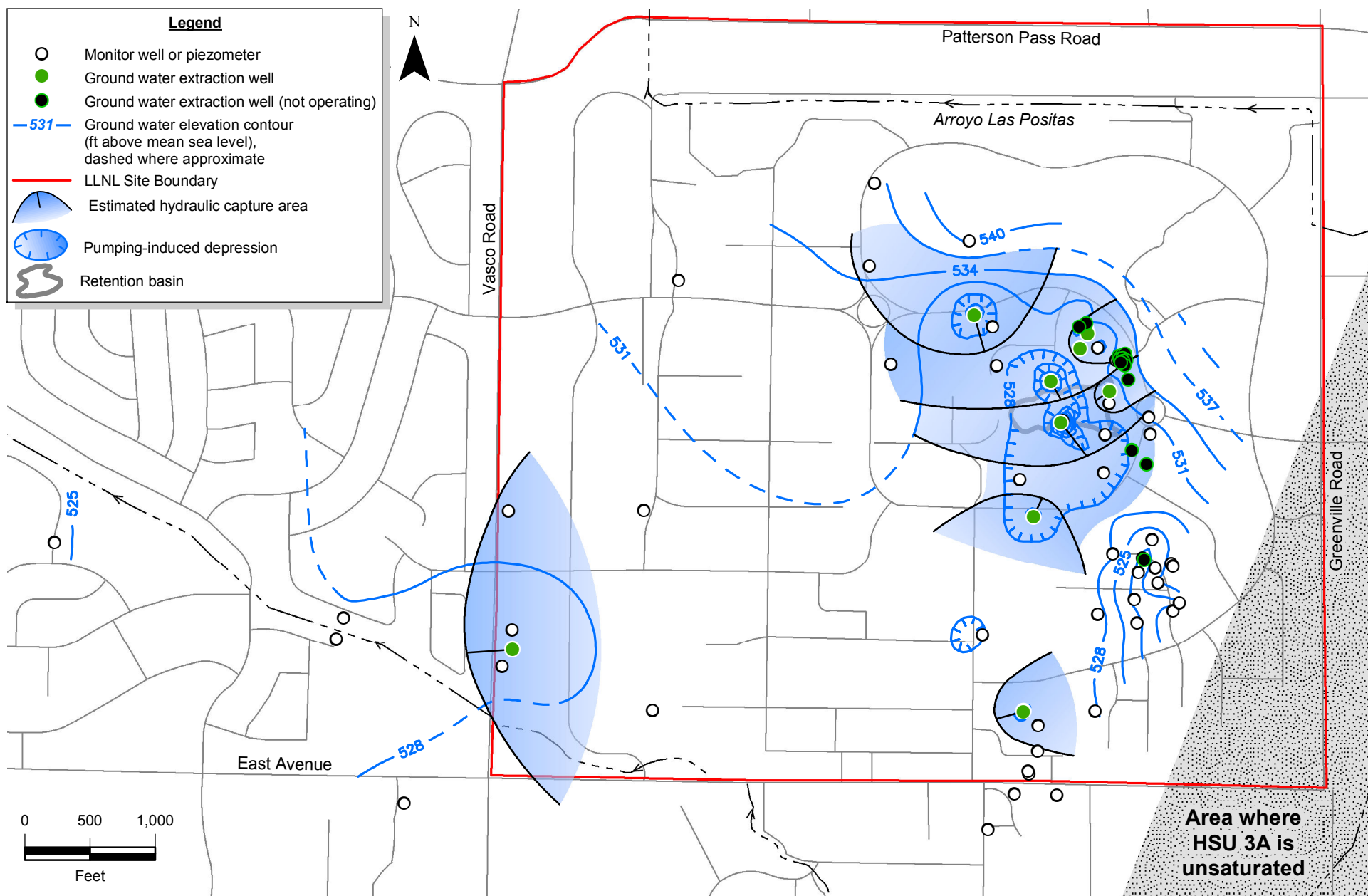


Figure 4. Ground water elevation contour map based on 74 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2012.

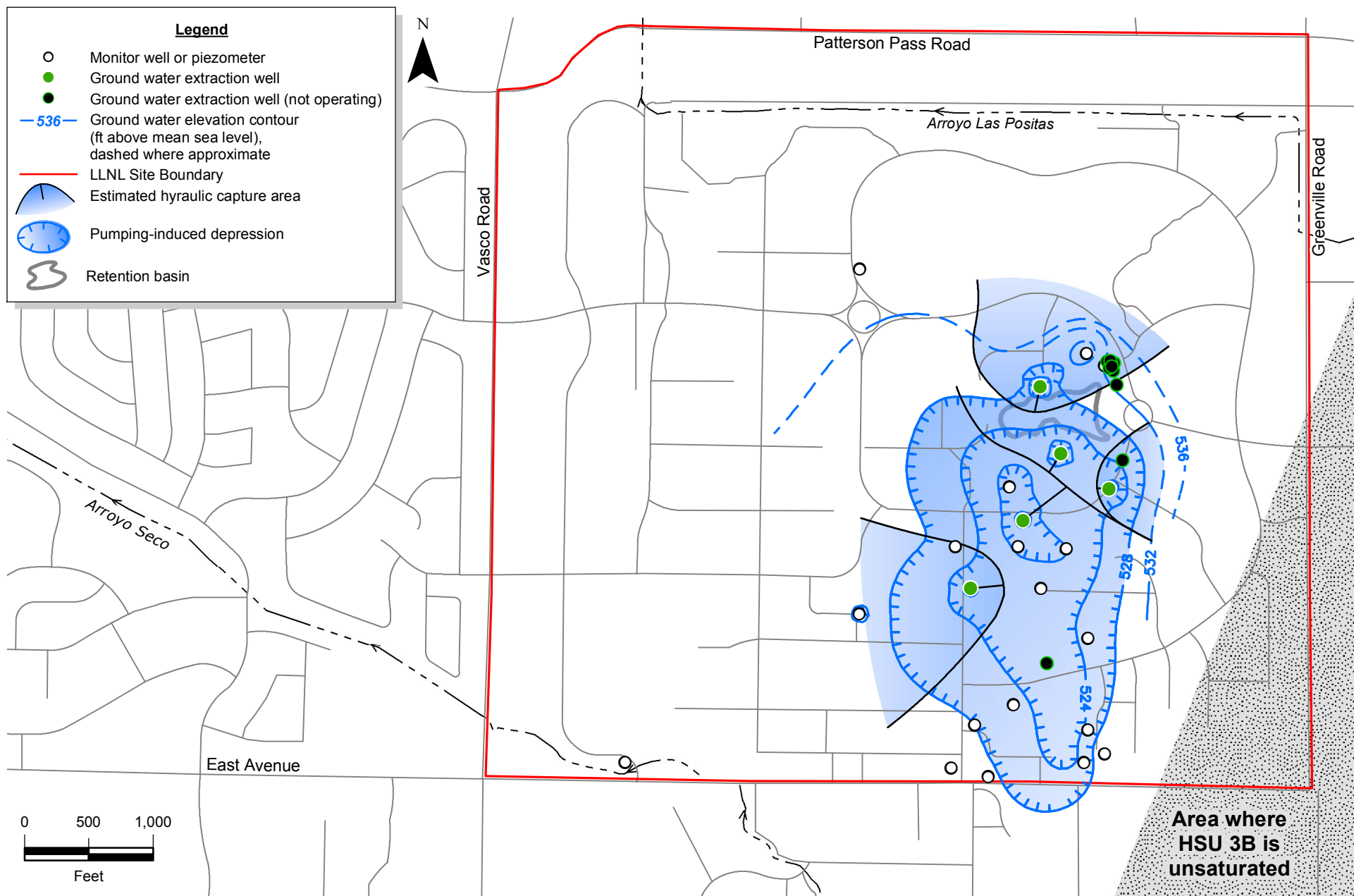


Figure 5. Ground water elevation contour map based on 33 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2012.

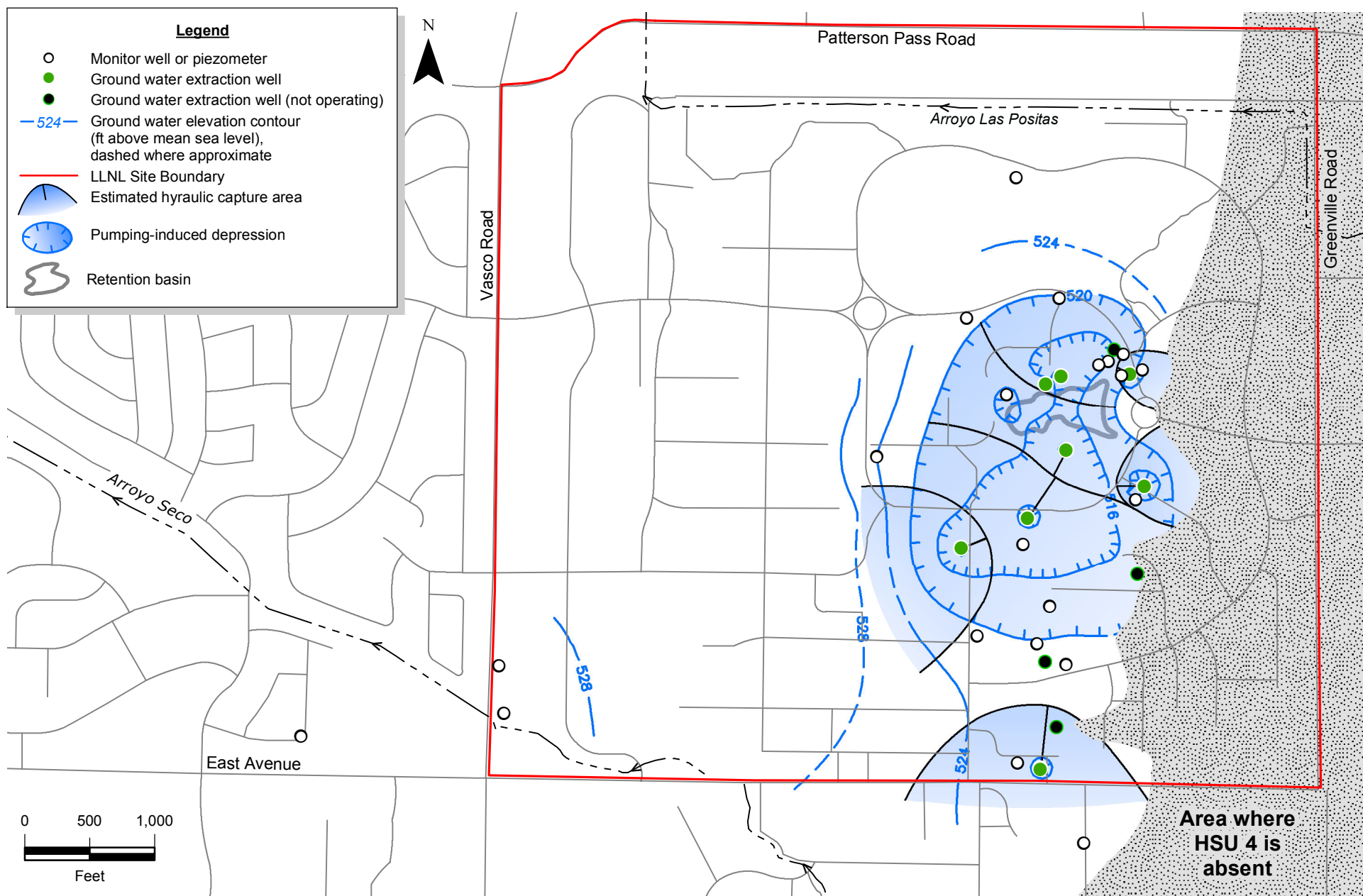


Figure 6. Ground water elevation contour map based on 33 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2012.

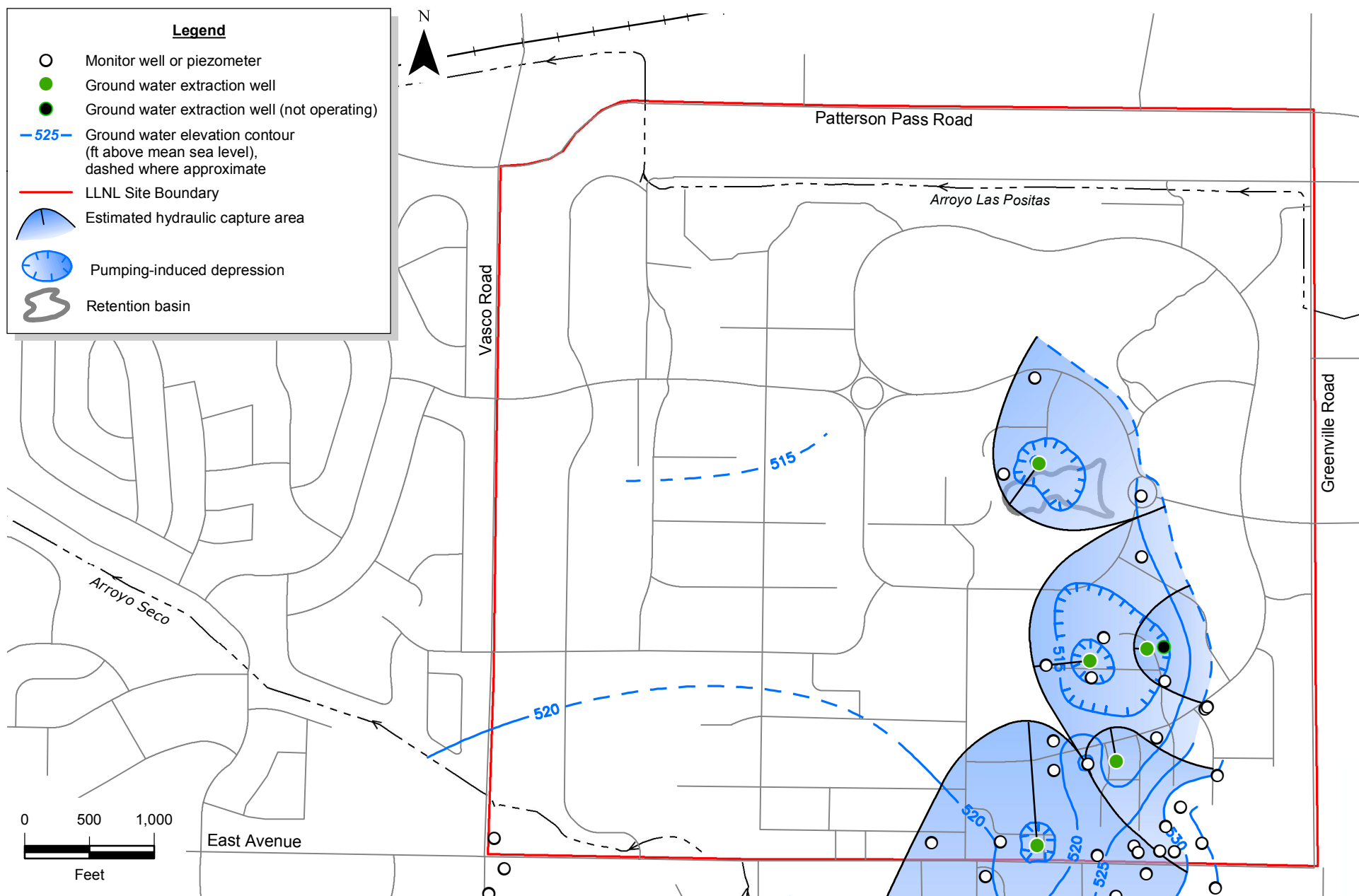


Figure 7. Ground water elevation contour map based on 44 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2012.